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SPECIAL REPORT: Fighting loss and damage

March 27, 1972

RAILWAY AGE

NATIONALIZATION

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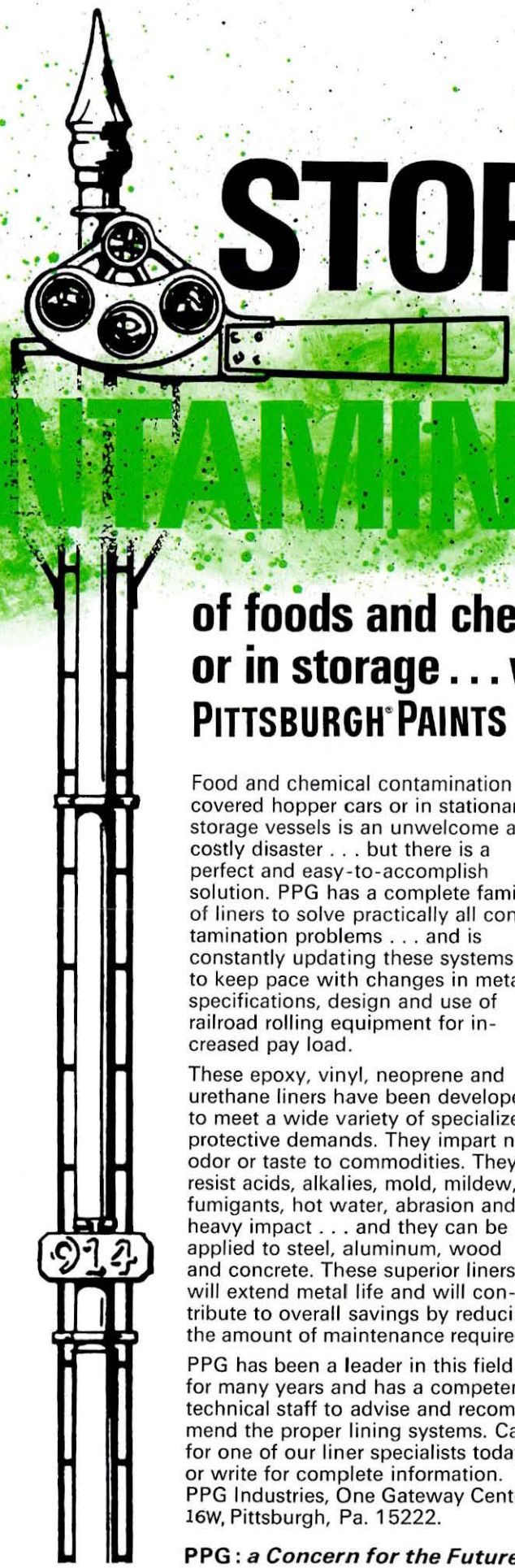

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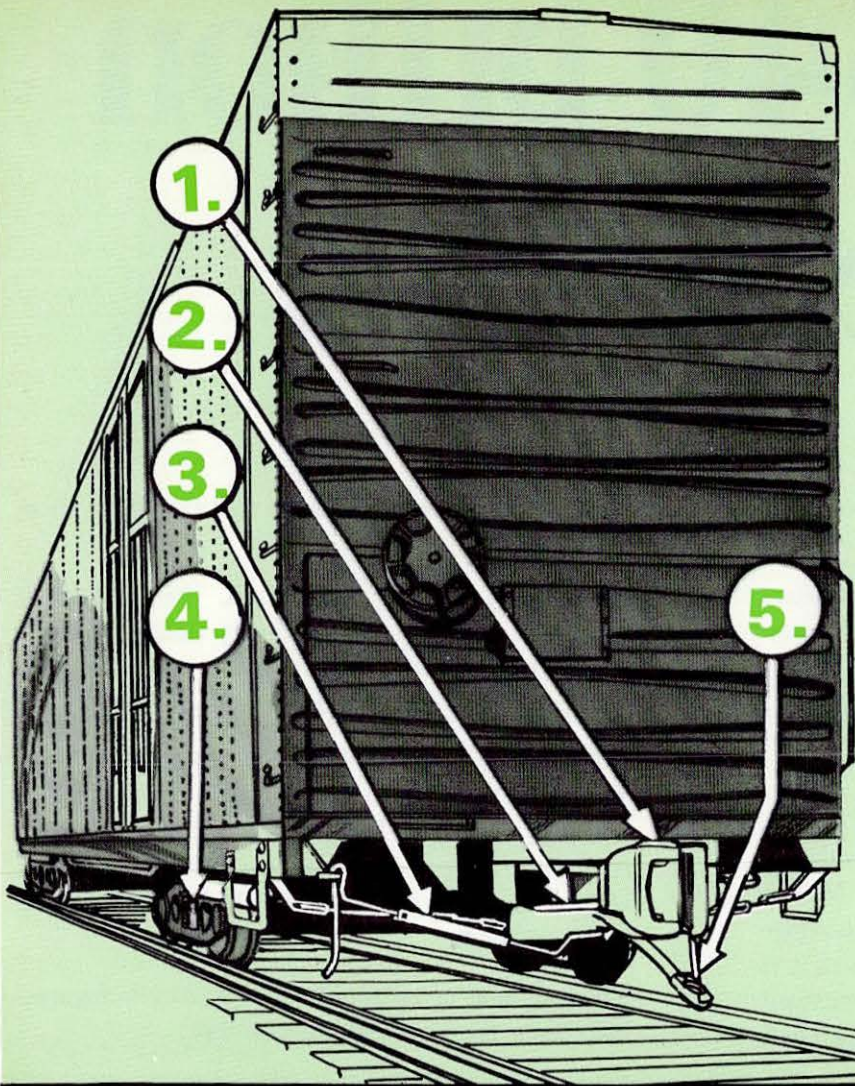

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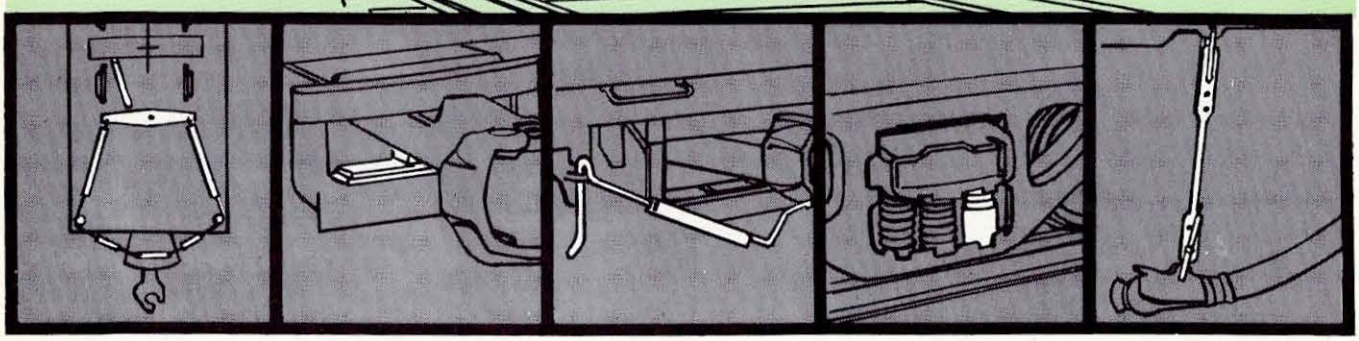

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Circle 41 on coupon page 67

The $40 billion alternative.

The near failure of a single railroad, recently, shook our entire economy.

The stopping of rail service for only 24 hours brought the nation to the brink of emergency.

Yet the warnings by the railroad industry that it faces an imminent crisis for survival is met with near silence.

The lack of alarm is ominous.

Maybe no one is listening because they think it is a case of "big business" crying wolf. Maybe others are calm because they expect the government will not let the railroads collapse. But it is not a case of crying wolf. And the government is not acting swiftly enough to prevent a collapse.

The alternative is clear and frightening. It is the nationalization of our railroad system.

And it could be a $40 billion alternative.

In fact, estimates range from over $20 billion to $60 billion as to how much it would cost our government simply to acquire the country's railroad system.

And this is only the beginning of what it would cost the country's taxpayers. Another $36 billion must be spent in the next 10 years to keep plant and equipment operable and to expand and improve it, as the country's growing transportation demands will require.

Then there is the excessive cost of nationalized rail service, as already proven by the highly developed countries who have nationalized their railroads.

In Western Europe and Japan, the taxpayers must add about 20 cents to every dollar taken in by the national railroads. Such a deficit in this country would amount to over $2 billion a year.

But the cost of nationalization does not end here. Taxpayers are also consumers. The freight charges collected by government-owned railroads are 50% and, in some cases, even 100% higher than the costs for similar shipments via U. S. railroads.

The real cost of nationalization must be figured into the price of everything we buy.

Is there another alternative?

Yes.

It is the abolishing of century old laws that are strangling our railroads, that many government officials have admitted are outdated and no longer justified. Laws that are prejudicial to railroads within our total transportation system, that prevent them from freely competing for new business, from ending the causes of huge losses such as unprofitable services, that impose startlingly discriminatory taxes on them and deny them fair participation in government programs for transportation.

These are the alternatives. But, we must choose now...or the choice will be made for us.

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Inside

LUTHER MILLER

A DEFENSE, NOT AN ATTACK

The special report on nationalization which appears in this issue of Railway Age (p. 29) should not be construed as an attack on nationalized railways. It is, rather, an attack on nationalization as a way out of our own transportation difficulties. It is a defense of our privately-operated railways; a documentation of their superiority over all other systems as prime movers of 40% of this nation's commerce, and their continuing role as contributors to, rather than burdens on, the national economy. It is also a warning that they may not be able to perform that role much longer unless steps are taken quickly, by those in power, to resolve long-standing problems that afflict all regulated surface transportation carriers.

RA Publisher Robert G. Lewis, in a recent speech on nationalization before the Manufacturers Association Traffic Club of Lancaster, Pa., said at the outset: "I am not about to toss brickbats at my good and able friends who run these [nationalized] railways. For the most part they do an exceptionally fine job, frequently under conditions which are very trying."

But he also said: "I can tell you this: Shippers in these countries covet the kind of equipment and service, and especially the customer attention, which shippers in the U.S. take for granted."

Highly-selective comparisons can be misleading, considering the great disparities that exist between any two countries. But the broad pattern that emerges from a study of not one overseas system but several does have, we submit, validity.

To make our own comparisons as valid as possible, we chose not the worst-run of the nationalized railways, but the best; not the most backward, but the most technologically advanced.

"ASK THE MAN WHO USES ONE"

We acknowledge a heavy debt to others who have worked in this field, especially the Union Pacific Railroad from whose study, "A Brief Survey of the Railroads of Principal Industrial Countries," we have quoted liberally. A similar but smaller-in-scope study by the Southern Railway also provided valuable source material.

To put this material into current perspective, Publisher Lewis a few weeks ago revisited Europe. Somewhat like the man in that famous automobile ad of a few years ago, Lewis decided to "ask the man who *uses* one." What European shippers told him about rates, service and equipment was not the kind of glamor story that American travel editors come home with.

With this trip, incidentally, our publisher has now logged well over 100,000 miles of travel on 35,878.2 miles of nationalized railways in 36 countries. His verdict: "Being a railfan, I like them all. Being also a fan of efficient railroading, I like ours better."

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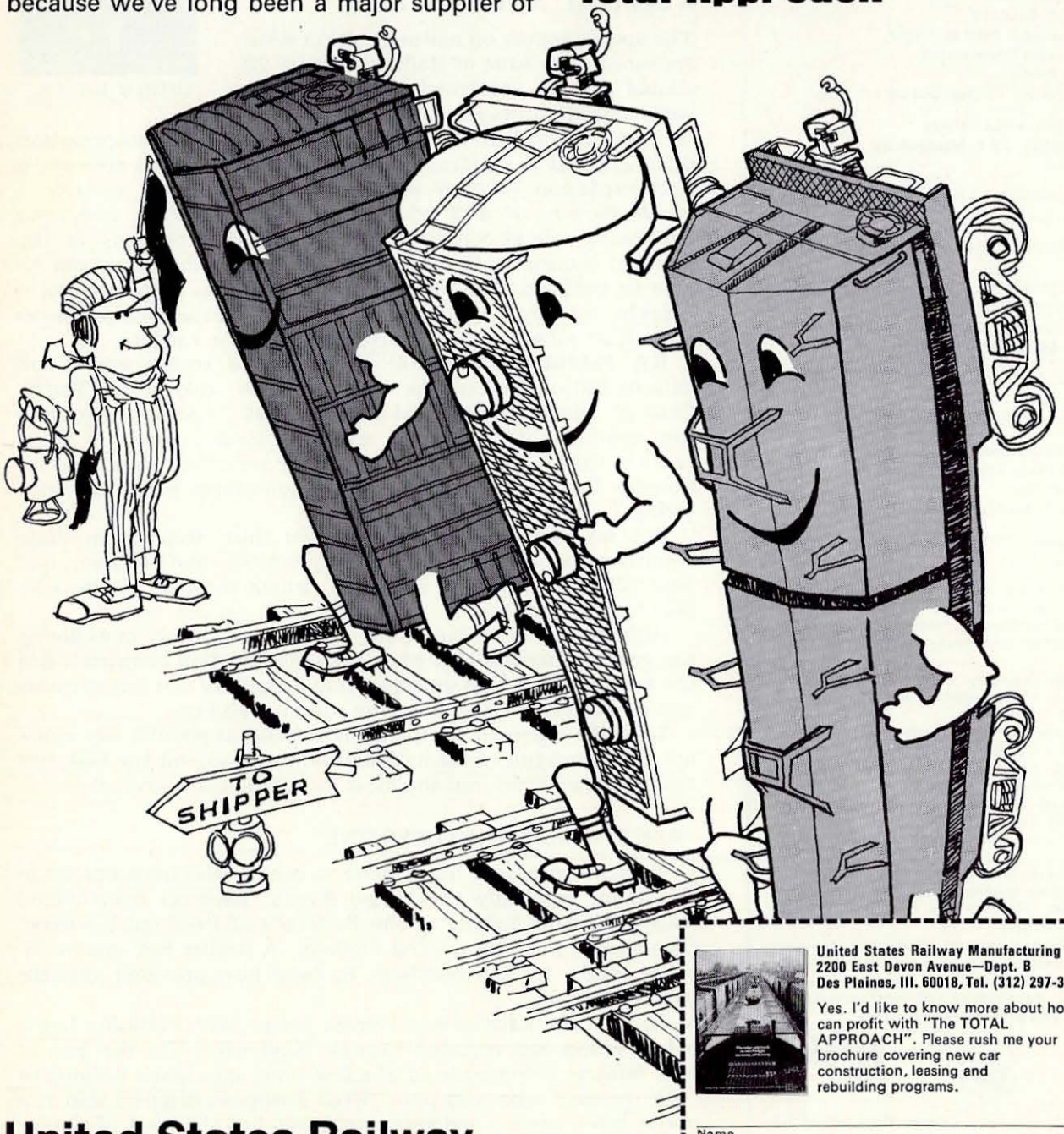
Total Approach



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RAILWAY AGE

March 27, 1972

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Short and Significant

LABOR CLIMATE: EARLY THAW, OR LATE CHILL?

With March slipping away and April fast approaching, things seemed more wintry than springlike on the rail labor front. On a national basis, the carriers and the small (in terms of railroad employment) Sheet Metal Workers' International Association remained deadlocked, with time running out. And on a "local" basis, giant (by any measure) Penn Central seemed determined to carry out a plan to drop 6,000 train-service positions April 1—a move which would almost certainly bring some form of retaliation from the United Transportation Union.

FEC: STRIKE PROBLEMS LINGER

Fanfares for the end of the long Florida East Coast non-op strike may have been a bit premature (RA, Jan. 10, p. 11). Under a settlement proposal which had preliminary court approval, FEC was to pay $1.5 million to the court—and the money was then to be paid to the unions and to individual claimants as ordered by the court. But the claimants can't agree on who gets how much—and the court, apparently, has a real problem on its hands.

NEW HEALTH/WELFARE PLAN IN EFFECT

Since March 1, railroad employees have been working under a new health/welfare package—the result of negotiations successfully concluded between the National Railway Labor Conference and the more than 20 unions representing rail employees. Railroads pick up the entire tab for the program—and it's estimated that their annual cost will be about $340 million.

ICC APPROVES EMPLOYEE PURCHASE OF C&NW

The Chicago & North Western is another step closer to being employee owned. The Interstate Commerce Commission announced last week its approval of the purchase—for approximately $415 million—of the road by North Western Employees Transportation Corp. (NETCO), an employee group headed by Larry S. Provo, who is also president of the railroad. The C&NW, which had earnings of over $4.4 million last year, is owned by Northwest Industries. Both the buyer and the seller were reported to be reviewing the ICC decision before taking any further action.

VOLPE WOULD DIVERT TRUST FUNDS TO TRANSIT

In a move that shook the highway lobby, DOT Secretary John A. Volpe on March 14 asked Congress to permit the use of Highway Trust Fund money "for urban public transportation or highways, at the option of state or local authorities," beginning with $1 billion in fiscal 1974, rising to $1.85 billion in 1975, and to $2.25 billion for the fiscal years 1976-1979. A Single Urban Fund would thus be created, of which 40% would be allocated to Standard Metropolitan Statistical Areas; 40% to the states; and 20% for the Secretary's discretionary use. All funds would be allocated on a 70%-Federal, 30%-state and local matching basis.

AAR SETS UP TWO NEW DIVISIONS

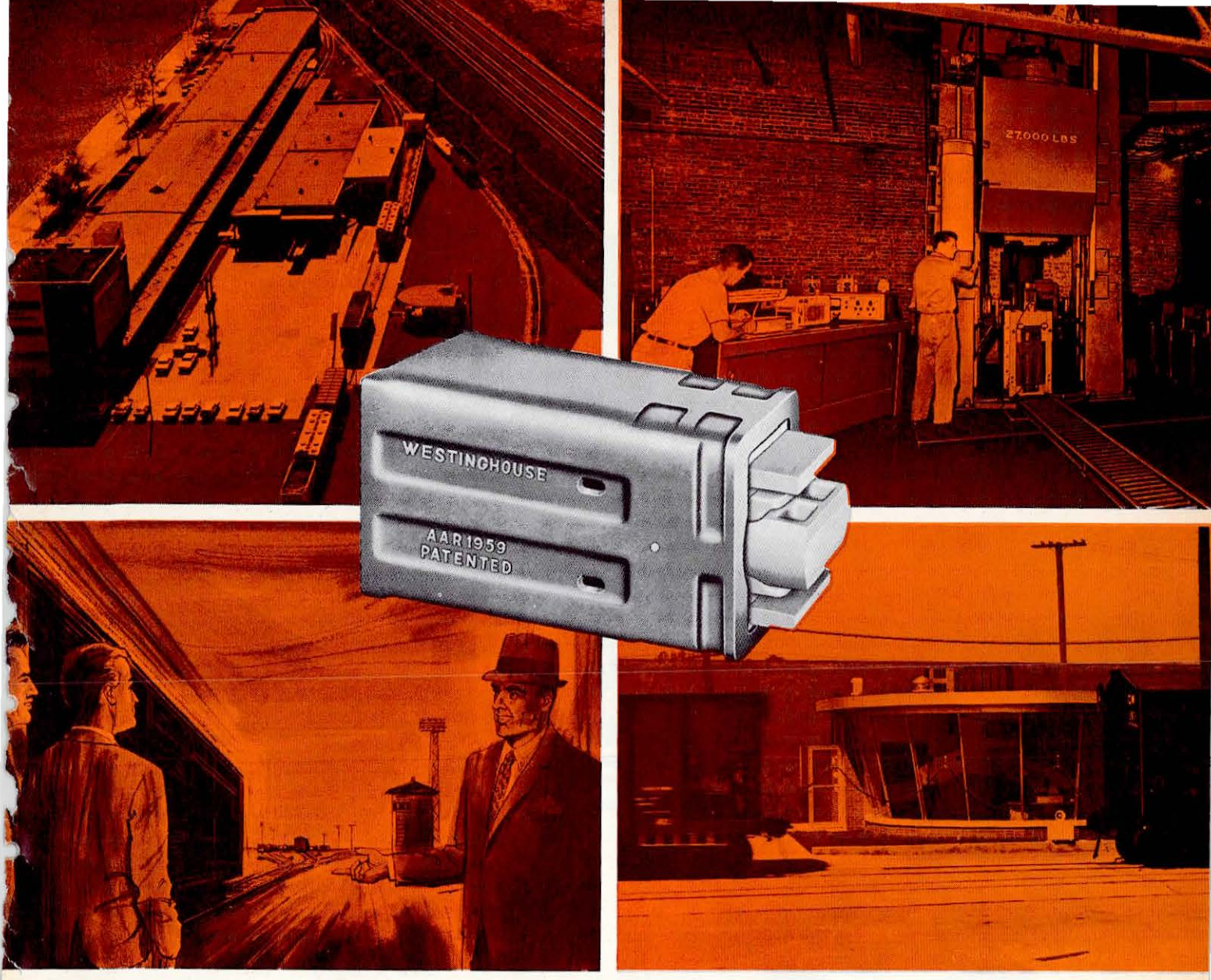
Two new divisions to deal with environmental and systems studies have been created as part of the reorganization and expansion of the AAR's Research and Test Department. James R. Coxey has been named manager of the Environmental Studies Division, and Charles E. Taylor will manage the new Systems Studies Division. Under Coxey's direction the ESD is examining such problems as diesel emissions, noise, waste disposal and development of biodegradable herbicides on rights-of-way. Matters under study by the SSD include electrification, car service rules and railroad yards and terminals.

CONTAINERS vs TRAILERS: AN N&W VIEW

Norfolk & Western President John P. Fishwick told the Containerization Institute in New York March 15 that for the immediate future "most of our domestic traffic loaded in flatcars will continue to be handled in trailers rather than in containers," although "just the reverse situation will prevail" in international commerce. Fishwick said railroads will tailor their resources and schedules "where the end result is to provide us with a chance at a profitable operation at the same time it facilitates the international flow of commerce. . .But we are not willing to dissipate our resources at places where potential traffic is meager and the cost of performing the operation far outweighs the benefits."

ROHR STRIKE CUTS SALES, EARNINGS

A 63-day strike at a pair of its major manufacturing plants in California was blamed by Rohr Industries, Inc., for declining sales and earnings in the six-month fiscal period ended Jan. 31. Affected by the strike, which ended Jan. 31, were the Riverside and Chula Vista operations. The latter is the assembly site for new transit cars for the San Francisco Bay BART system. Sales volume during the six-month period dropped about $40 million (to $127.3 million) from the previous six months. Earnings were $1.8 million, down from $2.1 million, in the earlier period.



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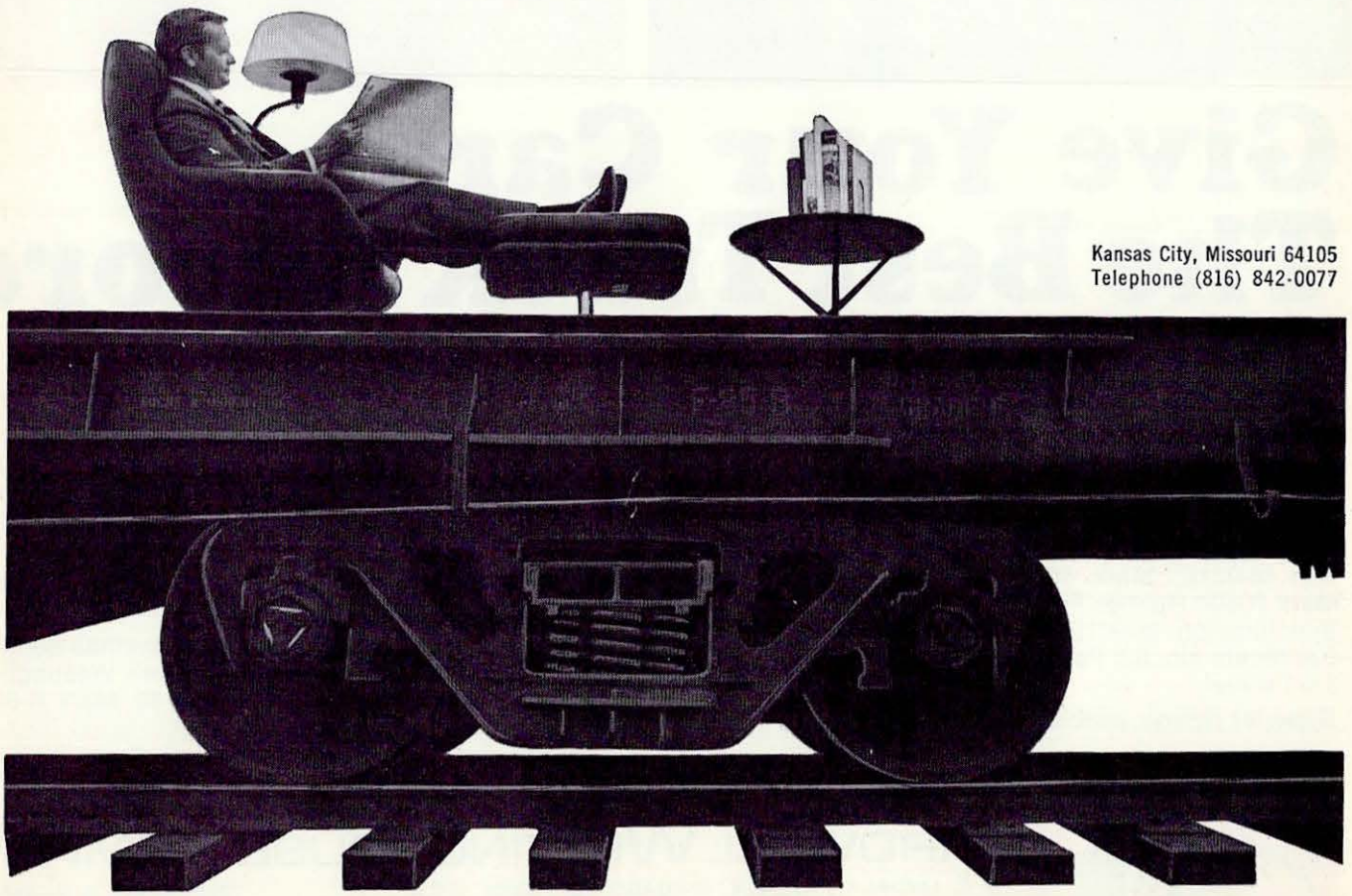

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RAILWAY AGE
NEWS

CREW-CONSIST LAWS: Two down, two to go

At the beginning of 1972, just four states still had crew-consist laws on the books—Ohio, Indiana, Wisconsin and Arkansas. Now, the list is down to two—and there is at least a possibility that it will be down to zero by yearend.

This is what happened—and what's happening:

—Ohio legislators approved an outright repeal, after first throwing a scare into repeal forces with an amendment that would have keyed crew size to train length.

—In Indiana, crew consist has, in effect, been restored to the coverage of collective bargaining agreements.

—In Wisconsin, repeal got through the Senate but time ran out before it could be advanced for consideration in the Assembly. But now, railroads and the UTU have agreed on a plan for repeal which will likely go before a short legislative session in June.

—Arkansas, with the nation's oldest crew-consist law, may have its shot at repeal via referendum in the November elections. Petitions to place the proposal on the ballot have been prepared but not filed, and no filing date has been set.

Total cost to the railroads of applying the laws in the four states has been estimated at $76.5 million—$29 million in Ohio, $22.8 million in Indiana, $12.7 million in Wisconsin and $12 million in Arkansas. It is perhaps significant that the successful repeal efforts thus far have come in the two states which (1) have been costing carriers the most money, and (2) are heavily industrialized and thus subject to strong labor influences.

It may be worth noting, too, that Ohio and Indiana (along with New York, which repealed its crew law last year) are states where Penn Central has a heavy concentration of operations. PC President William H. Moore and the trustees have been outspoken in their comments on the bankrupt road's labor-cost problems. And the results in these states seem to indicate that the message got through.

There is a certain irony in the repeal job that remains to be done. Obviously, the first shall be last: In both Arkansas and Wisconsin, crew laws date back to 1907; they were the "pioneers," and now they are going to be the last to have a chance to undo what was done so many years ago.

A few weeks ago, it seemed that Wisconsin might come through. In the end, however, repeal forces simply couldn't beat the clock—though they may well have had the necessary votes, had the repeal bill actually come to a vote.

In the frantic final days before adjournment, it became clear that repeal was running out of time—unless it could be called up as a special order of business, a move that requires two-thirds approval. Twice the Assembly voted on a call-up—and twice the proposal fell short, with 58% approval on the first try and a shade over 60% on the second. Had it been accepted as special-business, it would have required only a majority for actual passage.

> Action in Ohio, Indiana could save railroads up to $52 million a year.

The situation in Arkansas is something else. There, voters have been given three opportunities to drop the state's crew-consist law, most recently in a 1970 referendum. The courts also considered the problem in the mid-1960s, but a favorable lower-court ruling was later overturned by the U.S. Supreme Court in a decision that dealt with jurisdictional matters rather than with the merits of the case.

In all recent repeal moves, railroads have emphasized their willingness to protect employees against possible adverse effects of repeal—and to gain the benefits of repeal on an attrition basis. In Arkansas, however, this willingness is carried to what must be the ultimate step: Petitions aimed at putting repeal on the ballot involve a two-part proposition—one part dealing with repeal and the second establishing that "No railroad employee who has seniority in train, engine or yard service in this state on the effective date of this act shall be discharged, laid off, furloughed or suffer reduction in earnings by reason of this act."

In the past, in Arkansas and elsewhere, opponents of repeal have laid their case largely on a few issues—safety, employee (or job) protection and locomotive-manning on passenger trains. Arkansas roads are prepared to stack their safety record up against the records established in states which do not require extra train-crew employees; the ballot-proposition contained in the petition would seem to handle the protection argument adequately; manning of passenger-train power (which has never really been a valid issue) should never come up again in Arkansas because, since Amtrak, there is no passenger-train operation in the state.

One further point which legislators in Wisconsin and voters in Arkansas may have to consider is the impact economically of being the only states with extra-employee laws. In both states (as, earlier, in New York, Ohio and Indiana), railroads have raised the question of imposing a surcharge on originating and terminating traffic in order to put the added cost where they believe it belongs—namely, on those states which continue to maintain crew laws. Western-railroad traffic officers had planned to meet late in March to consider the Wisconsin proposal (pegged at $10.30 per car). In Arkansas, railroads have agreed on a similar charge ($10 per car, $5 per trailer). There, the proposal has gone through the appropriate bureaus but it has not yet been filed with the regulators.

With the attrition provisions involved in states which have repealed their crew laws and with the protective provisions promised in the others, of course, repeal itself is only a step toward realizing significant and needed savings. But, it's a big one.

Lines on Labor

GUS WELTY

QUESTIONS GALORE. . .

First of all, there was the Sheet Metal Workers' International Association, free to strike but perhaps not ready. Then, there was Penn Central, getting set to dispense with continuation of thousands of "unneeded" operating positions represented by the United Transportation Union. There was Southern Pacific, apparently the first carrier to be hit in a dispute related to the application of the new UTU contract. And in the background (but maybe not too far in the background) there was a stirring on Capitol Hill, where a new emergency-disputes proposal seemed to be gaining support.

. . .BUT, AS USUAL, NOT MANY SOLID ANSWERS

The situation involving SMWIA was, to say the least, confused. As March sped by, it appeared that the union was free to call a general strike. But there were indications that the union preferred a selective approach—which, based on past court rulings, would presumably require a two-week strike notice. Whichever way SMWIA chose to move, there was the question of government action: Would there be an emergency board—or wouldn't there? And, just to add a final touch of confusion, there was the question of court action—on a union bid for an OK to bargain and settle selectively.

The Penn Central/UTU affair posed different problems—but the emerging picture was no less fuzzy. If PC carried through its plan to adjust crew consists, UTU said, the union would "not hesitate to take steps to retaliate." UTU was not specific on what those "steps" might be. But the odds seemed to favor retaliation by lawyer rather than by picket. PC's peculiar status was one factor to be weighed. At the same time, no realist could expect a union to lie back and enjoy what was about to happen.

MEANWHILE, DOWN ALONG THE POTOMAC. . .

One thing that both the Sheet Metal Workers and UTU had to be keeping in mind was the mood of the Congress. And in some ways, that mood seemed surprising—particularly during an election year. Perhaps it was the almost-constant turmoil on the docks in recent months. Perhaps it was disillusionment over new trouble in the railroad industry at a time when some movement toward accommodation seemed to be in the works. Whatever the reason(s), those elected officials who favor emergency-disputes legislation were a lot less lonely than before. And both SMWIA and UTU had to be wondering how far they could go before a majority in Washington would stand up and declare it: "Enough is enough."

Both the Administration and transportation interests have had proposals before Congress for a long time. But attention now seems to be focusing on a bill (S.3232) introduced late in February by Sen. Packwood, with a long list of co-sponsors. This is another "arsenal-of-weapons" bill, but one which (1) gives the President additional flexibility of action, and (2) recognizes that a transportation emergency doesn't have to be national to be an emergency. On the other hand, it also contains a "partial operation" alternative, and from a pragmatic operating and economic standpoint, that's bad news.

S.3232 may or may not fly. But it's on the runway. SMWIA and/or UTU could clear it for takeoff.

CNJ: End of the line in Pennsylvania?

Late in March the bankrupt Central Railroad of New Jersey acted to suspend service to all stations along its 175 miles in the Commonwealth of Pennsylvania, effective April 1. Freight and commuter passenger service on the road's New Jersey lines is to continue.

Cessation of service in Pennsylvania stems from the road's "Blueprint for Survival" which was submitted to the U.S. District Court a year ago. Soon thereafter NCJ filed for abandonment of the lines on which it will now suspend service. CNJ's plans for elimination of unprofitable operations were instrumental in securing a $6-million Federally guaranteed loan. U.S. District Court Judge Anthony T. Augelli in Newark N.J., has directed CNJ Trustee Robert D. Timpany to cease all CNJ operations in the event the ICC or any court denies the abandonment application in whole, or in any substantial respect. Judge Augelli's directive to cease CNJ operations in Pennsylvania on April 1 was affirmed by an appellate court in Philadelphia on March 10.

The Lehigh & New England, a CNJ subsidiary in Pennsylvania which is not in bankruptcy, has requested an ICC service order to operate approximately 25 miles of the CNJ line northwest of Bethlehem, Pa. Delaware & Hudson, Lehigh Valley, and Reading are seeking ICC approval to serve other CNJ customers at various points. Certain other bridge routes have already been altered to avoid the CNJ's Pennsylvania lines and others will be changed by April 1.

Timpany wrote to shippers that CNJ's New Jersey freight customers will have service equal to, or better than previously offered. "CNJ's survival," he continued, "requires that traffic flow over the new routes."

From 1946 to 1952 the CNJ routes in Pennsylvania were operated by a subsidiary, Central Railroad of Pennsylvania, which was organized to eliminate payment of certain New Jersey franchise taxes. When courts held it was proper for New Jersey to tax the combined earnings of CNJ and CRP, the arrangement was ended. CNJ emerged from a ten-year receivership in 1949 and again filed for bankruptcy in 1967.

For years the state of New Jersey has been subsidizing CNJ commuter service and recently has come up with other financial plans to preserve CNJ freight operations in the industrialized northern portion of the state. Since announcement of the Pennsylvania service suspension, CNJ has been in close touch with its unions. And, said a CNJ spokesman, "labor now realizes we are no longer crying wolf."

Don't kid yourself about Nationalization, it's a curse not a cure.

Look at these facts:

1 Even though the financial position of the Nation's railroads is extremely poor, it should not be forgotten that U.S. railroads still manage to earn a small profit; that they do this with virtually no government aid; and that rather than being a tax burden, they are a taxpayer, contributing over $400 million a year in income and property taxes.

2 Practically every state-owned railway system in the world loses tremendous amounts of money. Losses range from 300 million to 600 million dollars annually for the British, Italians and the Japanese. And the French around 900 million a year.

3 It will cost the U.S. Government an estimated 60 billion dollars to take over U.S. railroads. It is estimated another 2½ billion dollars a year deficit will have to be absorbed by the government.

Where will this money come from?

There is no magic in government takeover. It merely transfers responsibility for the problems from private industry to you... the taxpayer.

4 **What happens to America and the free enterprise system?**

The dollar cost is just part of Nationalization. There would be another cost, perhaps even more significant to our entire way of life. And that is the cost to our free enterprise system. A system which is responsible for the fact that the United States has the highest standard of living in the world; it is this free enterprise system which is responsible for the fact that the United States is the most technologically-advanced country in the world today; it is this free enterprise system which is the economic equivalent of our political democracy. Government takeover of the railroads could well be the first giant step on the road to nationalization of other industries, including other modes of transportation.

YES, NATIONALIZATION IS A CURSE, NOT A CURE.

The alternative is the passage of the Surface Transportation Act of 1971. Support this bill to restore and maintain a sound surface transportation system in the United States. We all have a stake in the future of transportation in this country. Write your Congressmen and Senators expressing your concern for passage of Bill S. 2362 in the Senate and H.R. 10146 in the House.

SCL
SEABOARD COAST LINE RAILROAD

Circle 9 on coupon page 67

Watching Washington

REID BEDDOW

R.I.P. FASTCOR

Fastcor is dead. The legislative proposal to create a quasi-public corporation like Amtrak to run a $3-billion freight car fleet was done in by a rail decision to oppose the measure. The industry in effect vetoed the Fastcor bill, S. 1729, because rails were unable to secure an acceptable degree of private control over the corporation. Rail fears that Fastcor would disrupt private control of car supply thus proved more potent than the allure of new equipment underwritten by Federal loan guarantees. Discussions are now under way to salvage something from the wreckage. AAR lobbyists hope a new compromise bill can be worked out, with provisions for a Federal Railroad Equipment Obligation Insurance Fund and a national car information system.

WHAT NOW?

Exactly what can be done in the remaining life of the 92nd Congress was the subject of a high-level meeting on March 7 between DOT Secretary John A. Volpe and the Big Three leaders of regulated surface modes—AAR President Stephen Ailes, American Trucking Associations President William A. Bresnahan, and Water Transportation Association President John Creedy. Instigated by Astro General Counsel George Smathers, the meeting was attended by other high-DOT officials, including FRA Administrator John W. Ingram. The Big Three pled for DOT compromise on the array of transportation proposals now before Congress. What they said in effect was, "Let us all get behind the proposals which are supported by industry, shippers, and government, and dump the rest." In other words, the surface modes told DOT to forget about elimination of the anti-trust exemption of rate bureaus, creation of rate "zones of reasonableness," and freer entry into trucking—to name the three most controversial Administration proposals. Instead, Secretary Volpe was urged to line up behind loan guarantees for carriers, an end to discriminatory taxation of carrier property, and easier rail abandonment, all of which are contained in bills backed by industry, shippers, and the Administration. Combining the various bills in Congress into one agreed-upon measure, ran the argument, provided the best chance for gaining Congressional approval in the short time left this year. Ending discriminatory taxation itself could save rails about $54 million annually and provide the down payment for thousands of new freight cars. The Ailes-Bresnahan-Creedy approach was simple, rational, and politically pragmatic. Whether DOT bought the argument is another matter. Insiders say DOT is drafting legislation specifically tailored to aid Penn Central and other roads in reorganization by allowing them to lop off unproductive branch lines and to ban rates less than a bankrupt carrier's cost of providing service. They feel DOT may decline to give up its cherished deregulatory program, however unrealistic its chances for enactment in Congress are.

ICC may propose restructured West

The possibility that a proposal for a general restructuring of western railroads will be part of the final ICC examiner's recommendation on the Rock Island merger case has been indicated by a map in just-published Volume 2 of the three-volume report. Examiner Nathan Klitenic apparently plans to go beyond the scope of the original RI/Union Pacific/Southern Pacific applications filed in 1963. Klitenic has said that his conclusions and explanations will be made public only with publication of the third volume when there will be a "complete and intelligible understanding" of the "unified routes" shown on the map.

In 1970 Klitenic had made a preliminary recommendation for merger of RI into UP, selling the RI lines south and west of Kansas City to SP. He may now propose a reduction in the number of western roads that would go far beyond the applications before ICC. In Volume 2 discussion, he said that "for more than 50 years Congress, the Commission and the public have patiently awaited, to no avail, for the railroad industry to eliminate through merger the vast surplusage and duplicating services which the Midwestern carriers in these proceedings themselves so bitterly decry."

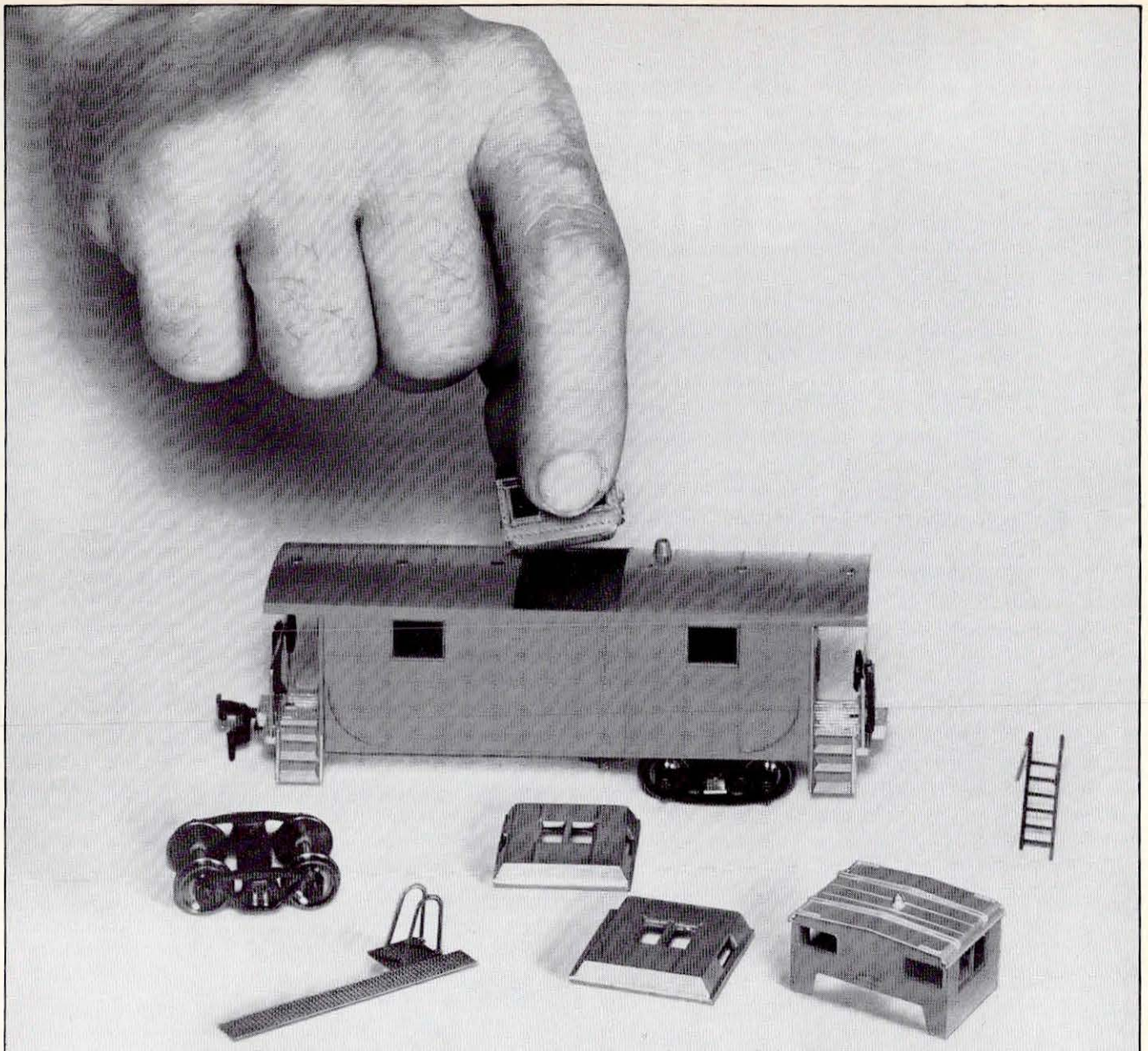
Klitenic's map shows only the Frisco and Milwaukee remaining unaltered and independent. While neither of these lines has been very directly involved in the RI merger case, a number of other roads which have not been parties to the case would be merged.

The Ogden, Utah, to Roseville, Cal., route of Southern Pacific and the Chicago & North Western, including its network of branches in the upper Midwest, would become part of Union Pacific to produce a single railroad between Chicago and the San Francisco area of California.

Kansas City Southern and the Missouri-Kansas-Texas would be joined with Southern Pacific and the southern half of the Rock Island to produce a new network in the Southwest.

Missouri Pacific, the Denver & Rio Grande Western and Western Pacific would become part of the Santa Fe, along with segments of both Rock Island and Southern Pacific. This amalgamation would give Santa Fe a new route between Chicago and San Francisco via Pueblo, Col.

Burlington Northern would take over another segment of Rock Island but basically would remain as it now exists. The Rock Island merger case is the longest in ICC history and also has involved the most voluminous presentation of evidence.



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MEMBER RPI

Circle 4 on coupon page 67

Southern Pacific makes a big thing of protecting your shipments.

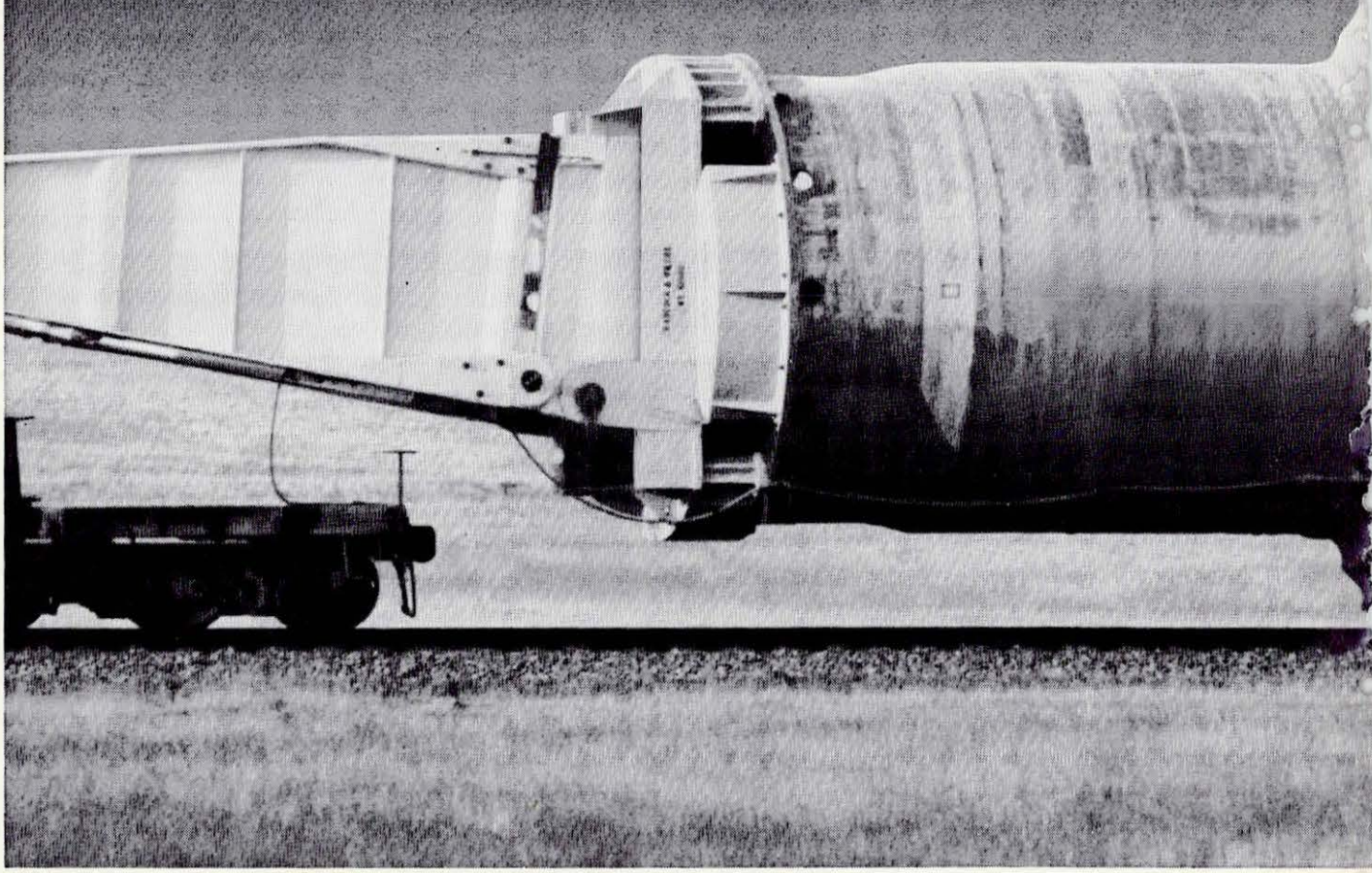
(Large or small. Huge atomic reactor shells, automobiles or carloads of almost anything.)

Nobody knows more about protecting your shipments than Southern Pacific. Because at Southern Pacific, safe handling is more than a motto. It's a way of life. That's one reason why Southern Pacific got the call to deliver this monstrous atomic reactor shell.

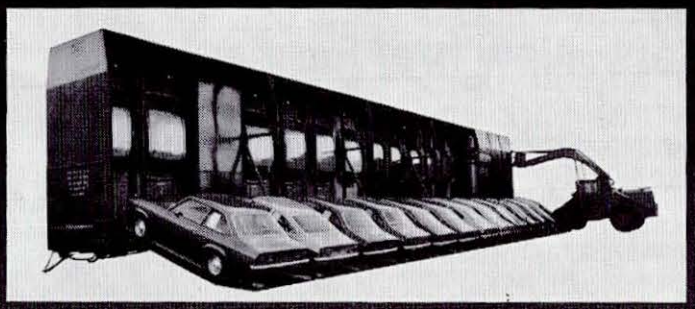
It took plenty of coordination and follow through, but Southern Pacific's experience and total involvement in safe handling made sure the huge 455 ton shipment was delivered in perfect shape. That's the kind of service Southern Pacific customers have come to expect.

This same kind of service, over the years, has continued to provide shippers with better and safer equipment innovations, too. Like the Hydra-Cushion Underframe, the Vert-A-Pac Car and Stac-Pac method of shipping new autos, just to mention a few.

They're all part of a constant endeavor by Southern Pacific to provide its customers with efficient, safe shipping.



Stac-Pac containers, each holding three full size autos, were developed by General Motors and Southern Pacific to deliver new automobiles with complete protection.



The Vert-A-Pac Car was also developed by General Motors and Southern Pacific, as a way to ship small autos—30 at a time—safe from weather and vandalism.

The Hydra-Cushion Underframe was developed jointly by Southern Pacific and Stanford Research in the early 50's to provide a safer ride for fragile freight.

Southern Pacific

—the transportation company that does things first.

Circle 38 on coupon page 67

ASME/IEEE conference told: Cheap cars can be costly

Purchasing the cheapest freight cars and car components can be false economy. This was spelled out at the recent Railroad Conference of the American Society of Mechanical Engineers and the Institute of Electrical and Electronics Engineers.

L.A. McLean, engineer of car construction for Seaboard Coast Line, told the Jacksonville, Fla., meeting that a decision by his road's mechanical department in the 1950s to spend $700 to $900 more on each new car is paying off today in terms of a fleet that is remaining in service with virtually no heavy repairs, short of derail damage.

"The lowest cost car meeting AAR specifications may not be the least costly piece of equipment over its life span," observed McLean. "Careful evaluation of each component and method of car assembly can mean vast differences in maintenance cost. . .It can provide us with equipment that can serve its purpose for 15 years and then be retired or, should circumstances warrant, rebuilt."

Some of the other benefits of spending "above the minimum cost" include:

—Greater availability, reducing the size of the fleet;

—Reduced switching costs;

—Increased per diem;

—Reduced shop facilities and forces to support the fleet.

"That last item," concluded McLean, "would ultimately permit railroads to move out of the car rebuilding business and concentrate on their primary purpose—the transportation of goods and materials."

A trend toward shorter-lived unit-train cars using thinner plates and sheets has been detected by H.P. Clapp and J.D. Swan of U.S. Steel. With low-mileage hopper and gondola cars in traditional bulk materials service it has been customary to rebuild carbodies one or more times before the running gear wore out. With unit trains, the opposite situation can prevail.

Since its introduction in the 1930's "primarily in response to the railroads' demand for a steel for freight cars that would be economical but have a higher strength and better corrosion resistance than carbon steel," said Clapp and Swan, COR-TEN A steel has demonstrated in numerous studies a service life of "on the average, at least 50% greater than that of copper-bearing carbon steel with cars in regular service." Studies of the use of COR-TEN in car bodies for freight cars in regular service and reports on three measurement programs taken in recent years with the unit trains of three railroads have shown good corrosion performance.

While North American freight-car technology seems unsurpassed, the refinements in motive power on other continents were presented as spurs to domestic development during the ASME/IEEE meeting. In one area, G.M. Beischer of Chesapeake & Ohio/Baltimore & Ohio, commented that for too long the design of trucks of American diesel-electric locomotives has lagged behind that in Europe. C.M. Smith, senior mechanical engineer-locomotives of Penn Central, observed that the latest running gear used under American locomotives "has just scratched the surface" toward improved truck designs. U.S., Canadian builders are working on this.

Even more radical changes could be ahead. Glen T. Fisher, director of special projects for Canadian Pacific, commented on his road's investigation of Swedish and Swiss electric locomotives last year (RA, June 14, 1971, p 30). "Recent alternating-current electric locomotives have been demonstrated to perform at levels of tractive effort and horsepower, for their weight, considerably higher than the present generation of diesel locomotives," said Fisher. "These factors are of major importance when determining the number of electric locomotives that would be required to convert an existing dieselized railway to an electric line."

For trailers: New braking device

A new anti-lock braking system for air-brake-equipped highway vehicles was demonstrated recently at the Bendix Proving Grounds, South Bend, Ind. The new system, marketed in the U.S. by Berg Manufacturing Co., Des Plaines, Ill., under a licensing agreement with Fiat of Italy, features an on-board computer which analyzes signals sent to it by wheel sensors and automatically intervenes to prevent wheel-locking when the brakes are applied.

A new Realco piggyback dry van equipped with the Berg-Fiat device was used in the demonstration. Runs were made over wet and dry surfaces as well as combinations of both, and brakes were applied during curve negotiations to show how the anti-lock device helps maintain vehicle stability.

The Department of Transportation has ruled that all air-brake-equipped highway vehicles built new after September 1974—including piggyback trailers—must be fitted with some type

of anti-lock device. (Until it was changed recently, the deadline for application of the devices had been January 1973.)

Most anti-lock devices on the market today cost approximately $600, and Berg's marketing vice president, Sergio Campanini, says that his is "very competitive in price" with the others.

Rails' canner-customers see big changes

The volume of canned foods to be shipped by the end of this decade may increase by 25%, says Mark H. Mitchell, chairman of the National Canners Association.

The canning industry, Mitchell said, is undergoing tremendous change and is facing a substantial increase in demand for its products. The annual canned foods consumption, excluding carbonated and alcoholic beverages, is at a record high of almost 135 pounds a person. "One of the most significant developments that can be expected to have revolutionary effect on retail distribution, and on producers such as canners, and indirectly on the transport industry, is automated checkout," he added. "It is coming soon."

"If you are in railroading," Mitchell said, "you might question how such a retail development could concern you. It may, because only the large and financially strong may be able to make the big investments involved in the electronic scanners, the computers, etc., needed. It will affect your canner customers because universal product coding and perhaps pre-pricing by them will be necessary. And all this will require more investment on their part, including more distribution warehousing. Where the facilities will be located—what the transportation equipment and service needs will be—surely you will become involved."

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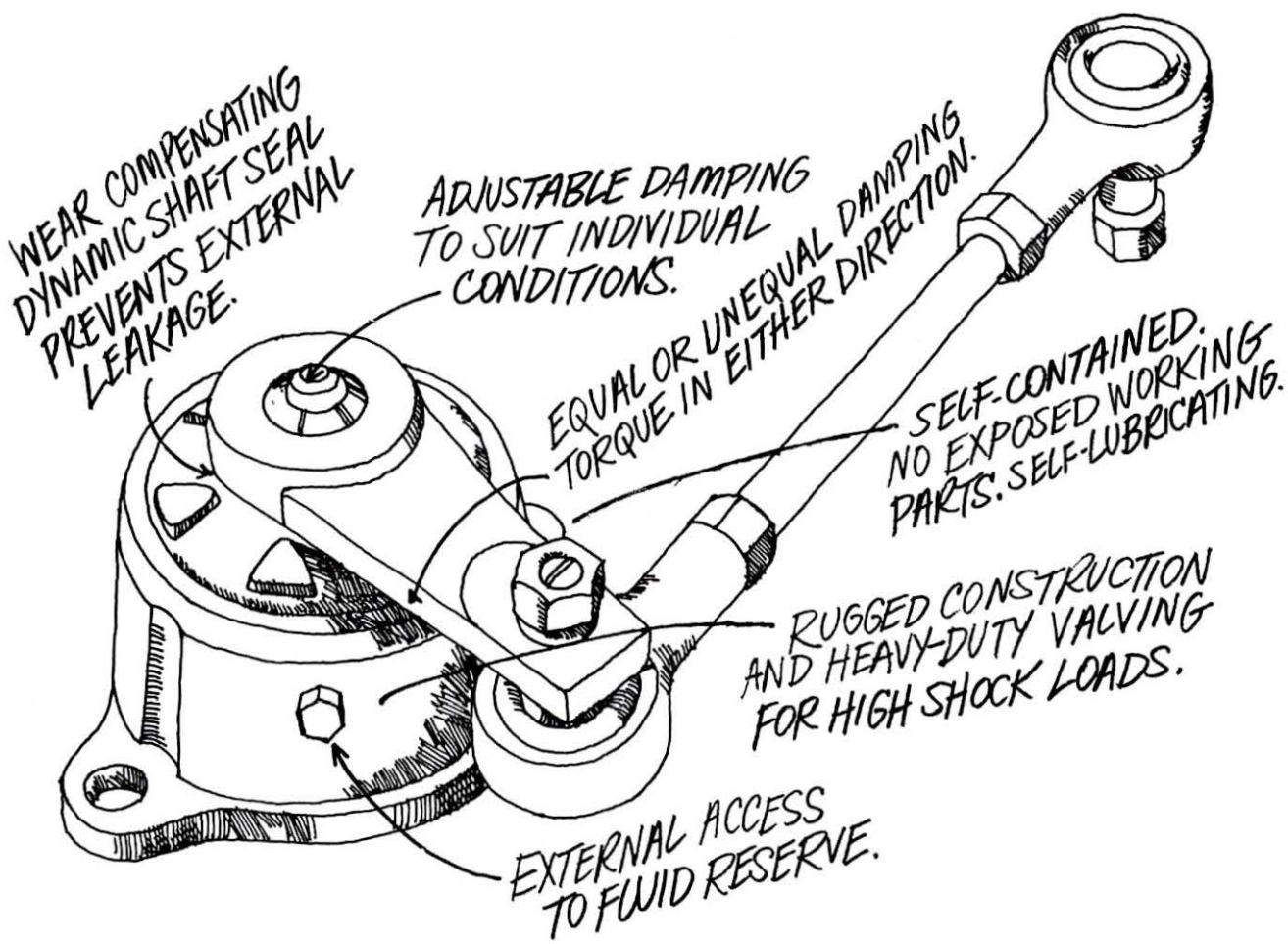
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Circle 12 on coupon page 67

FIRST CTC MACHINE between Stanley and Berwick, Ohio, on the Toledo & Ohio Central (now Penn Central).

FIRST SOLID-STATE CONTROL CENTER including field terminals was installed on the MP at Fort Worth, Texas, in 1967.

Sperry award spotlights CTC's contribution to rails

What has a replacement value of $860 million for U.S. railroads, is used every day by most of them and will be 45 years old July 25? Centralized traffic control. And the reason for bringing it up at this time is that two pioneers in the development of CTC and the equipment manufacturers have been honored with the Elmer A. Sperry award for their "distinguished engineering contribution which, through application proved in actual service, has advanced the art of transportation."

• **Wight developed CTC.** Centralized traffic control, of course, combines the safety features of signaling with a supervisory control capability for directing train movements from a central point. It was the decentralizing of the safety features while centralizing the control that was the contribution of Sedgwick N. Wight of General Railway Signal Co., and it made CTC feasible.

The first installation of CTC was placed in service July 25, 1927, on 40 miles of the former Toledo & Ohio Central (now Penn Central) between Stanley and Berwick, Ohio.

• **Baughman extended control.** From this modest beginning, CTC usage increased to over 100 installations covering 2,050 track miles by 1939. But one disadvantage was that the practical limits of control were about 60 miles. To provide greater range for CTC, George W. Baughman of Union Switch & Signal (now Signal & Communications Division of Westinghouse Air Brake Co.) started a development program which included multiple line circuits, relay coding systems and carrier controlled systems.

The first extensive carrier control system that really showed what could be accomplished went into service on Southern Pacific in 1943 covering 180 miles of line between Las Vegas, Nev., and Yermo, Calif., with control of the entire territory handled over just one pair of line wires. For the first 60 miles, controls and indications to and from switches and signals in the field and the control machine are direct current codes. Controls and indications for the next 60-mile section are sent over the same wire pair at carrier frequencies to the beginning of this section, at which point they are converted to dc codes for transmission to switches and signals. Similarly, the controls and indications for the third 60-mile section of CTC territory are handled at carrier frequencies.

Also, the one pair of control wires on this Las Vegas-Yermo CTC installation served as a party-line telephone system with more than 100 phones, and with individual calling to each phone provided by the CTC system. In addition, in each maintainer's home there was a phone that could be called selectively.

• **CTC pays its way.** Over the years, centralized traffic control has more than paid its way in reducing trackage, improving schedules and providing better utilization of motive power and rolling stock. Some of the advantages learned by experience over the past 45 years and use of the now more than 43,000 road miles of CTC in service, are:

—CTC can save one minute per mile for a freight train compared with performance in timetable and train order territory.

—CTC on single track can provide up to 75% of the capacity of a double-track line. In one instance during World War II, the Nickel Plate (now Norfolk & Western) handled 90 trains in one 24-hour period over single-track CTC between Buffalo, N.Y., and Conneaut, Ohio, without train delays.

—CTC reduces operating expenses by eliminating the need for interlocking and/or train order operators.

Engineering award. At the annual banquet of the Institute of Electrical & Electronic Engineers' international convention in New York March 22, the Sperry Awards were presented by the IEEE and the following engineering societies: American Society of Mechanical Engineers, The Society of Naval Architects and Marine Engineers, and the American Institute of Aeronautics and Astronautics.

Specific citations are as follows:

"Sedgwick N. Wight (in memoriam) for his foresight and ingenuity in the planning and execution of the first practical installation of centralized traffic control on a railway. This first installation gained world-wide acclaim.

"George W. Baughman in recognition of his engineering contributions which enlarged the scope and flexibility of application of CTC on the railways to the extent of exerting a controlling influence in the commercial success of this over-all system on a world-wide basis.

"William D. Hailes for his outstanding design and development of the apparatus and systems to further the principles of CTC on railways advocated by Mr. Wight.

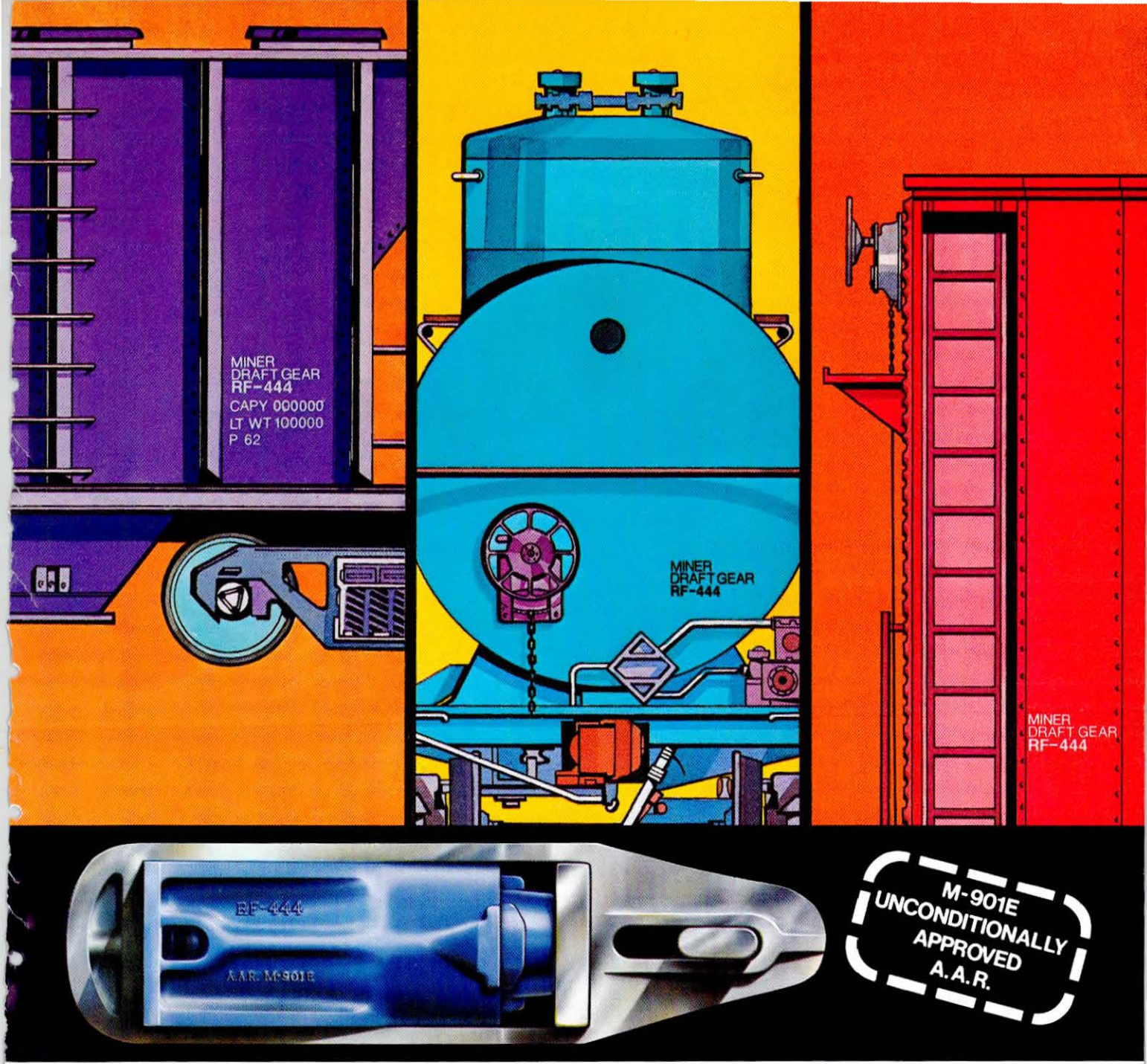
"Lloyd V. Lewis (in memoriam) for his outstanding designs of apparatus and systems with important contributions to the long life and reliability of CTC apparatus used on railways.

"Clarence S. Snavely (in memoriam) for his outstanding designs and developments to realize the greatest practical speed of operation of electromagnetic devices in CTC on railways.

"Herbert A. Wallace (in memoriam) for his early concepts and patented inventions outlining the broad fields of application of CTC railways.

"To the employees of General Railway Signal Co. for their dedication to the pioneering and planning of CTC for railways with special reference to the placing in service of the first installation which gained world-wide acclaim.

"To the employees of the Signal & Communications Division, Westinghouse Air Brake Co. for their dedication to engineering contributions which exerted a great influence in the success of CTC for railways on a world-wide basis."



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For example, PC's TrailVan service now ends the wait, wait, wait for rates and schedules.

How? Through these simple steps:

1. We've appointed outstanding men throughout the system as managers of Intermodal Sales and Terminal Service.

2. We've established schedules with more than sufficient frequency to accommodate you whenever you need a piggyback.

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We've created an "umbrella of accommodation." For you, the shipper who requires a strong sense of dependability . . . more trains when you need them (in fact, we run more piggyback trains than any other railroad) . . . more facilities, and more answers . . . not runarounds. Innovation and follow through of programs like these have made PC the number one piggyback operator in America.

You can count on us. Call your nearest TrailVan Sales and Service Manager. Write to Roy L. Hayes, Assistant Vice President — Intermodal, Room 1534, Six Penn Center Plaza, Philadelphia, Pa. 19104, for an illustrated brochure detailing Penn Central's TrailVan service.

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Model No. 2250 has a top release lever and Model No. 7400-3 has a bottom release lever. These brakes feature immediate or gradual load release. The Model No. 2211 features gradual release only.

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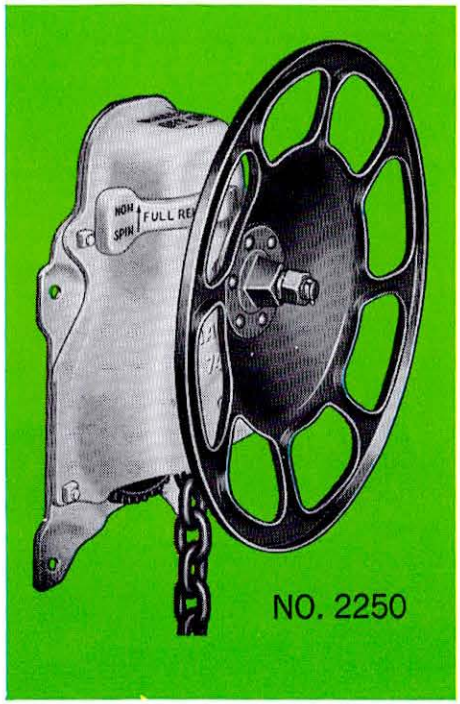

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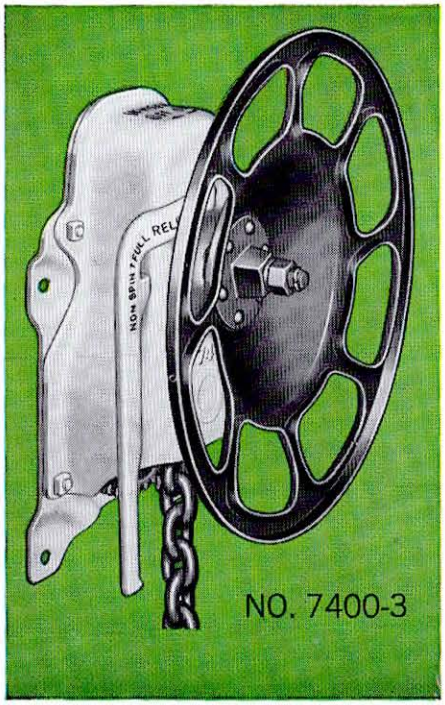

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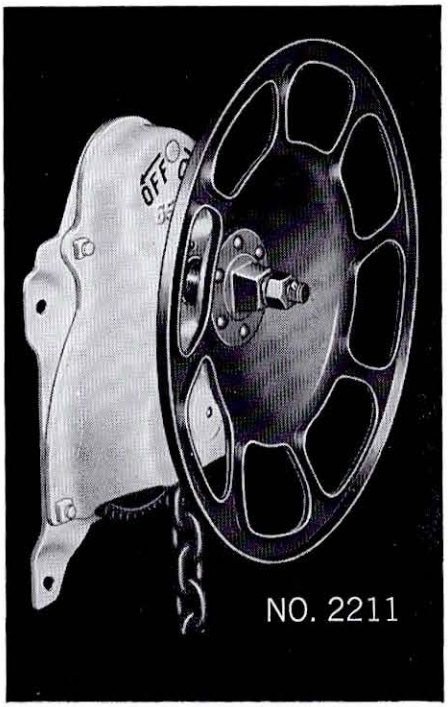

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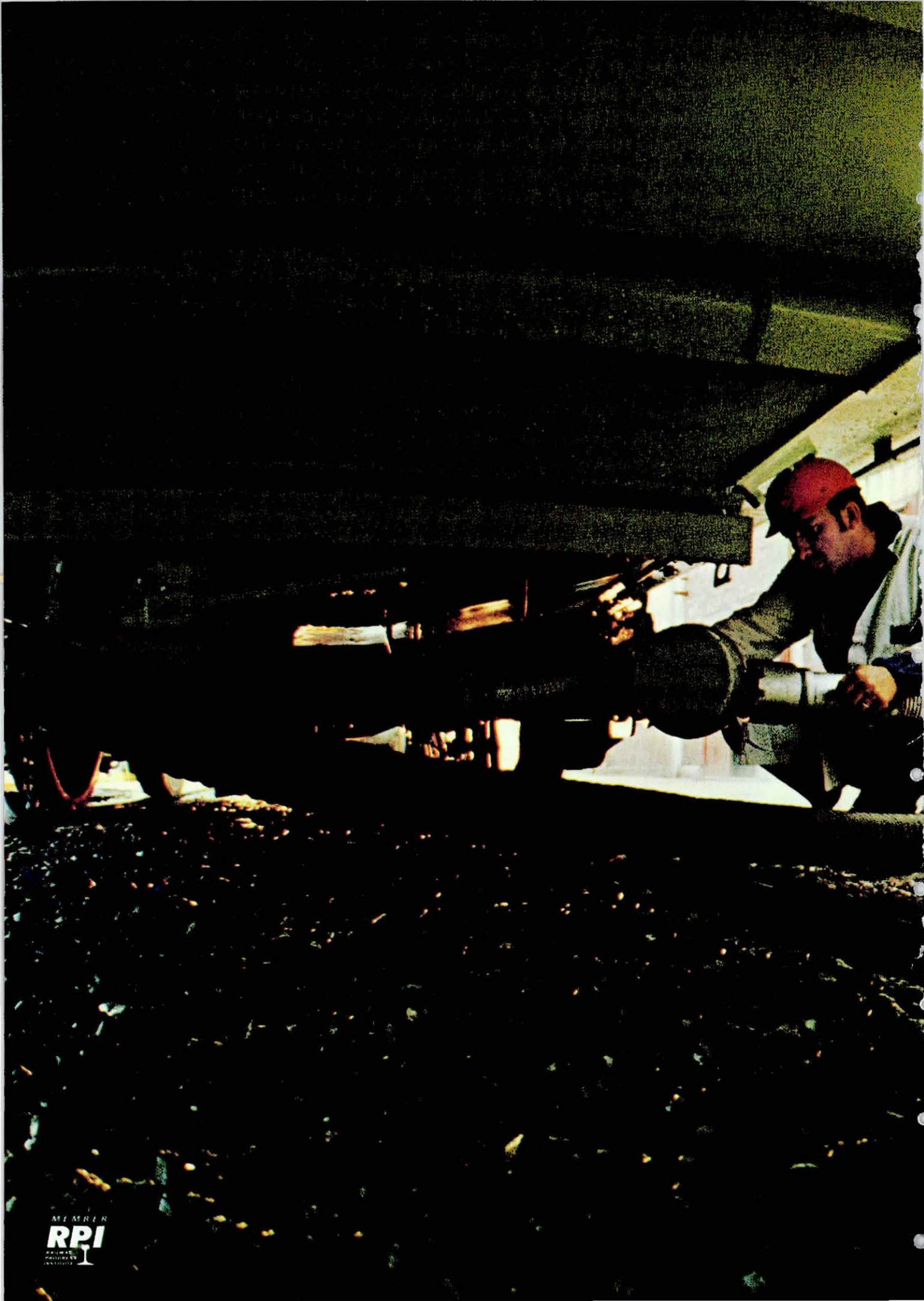
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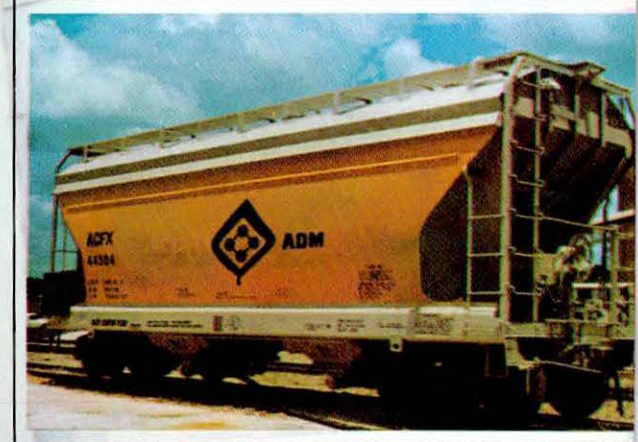
The Flour Power Car.



Handling's a lot simpler on ACF's Pressure Differential Center Flow car. In fact, one man can now hook up to unload in under 10 minutes. Because there's no bulky pressure sled to wrestle with.

We licked the sanitation problem, too. With hatches and outlets that seal out contaminants. So even difficult commodities arrive in superb condition.

At just 5 pounds pressure per square inch, the PD Center Flow can also carry powders, pellets or granules. Economically. And unload them easily into highway trailers or silos.

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ACF's PD Center Flow car. We keep the pressure low and the efficiency high.

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The Samson shoe
(AAR-1B)

In grinding wheel tests, see why railroad men say: "No spark fires with Samson".

See the dramatic difference in sparking from the standard shoe compared to the Samson . . . in this grinding wheel test you can make in your own maintenance shop. Think of the reduced fire hazard to your cars with less sparking from the Samson shoe.

Many railroad men have already been convinced by performance of the Samson shoe on test cars that this low-sparking Samson characteristic is the best way to minimize the hazard of fires along the right of way.

vs. the standard shoe.
(AAR-1)

One large fleet, for example, has been so impressed that they plan to have their entire metal shoe-equipped fleet on Samson shoes by April, 1972... and they have already purchased over 100,000 Samsons.

Their opinion of Samson performance: "There have been no fires on cars with Samson shoes. And the life of the shoes equals or exceeds Abex claims."

Other roads have been testing the Samson shoe with favorable results. Statements like these are in our records: "Samson provides 2 to 1 life over standard shoes." And "Samson provides improved train control, reduces stop distances dramatically."

America's railroads can best achieve maximum benefits from the Samson shoe through standardization. It should be used 100% on all metal shoe-braked cars to upgrade braking performance, reduce fire hazards, and reduce change-outs. To help speed this standardization to the benefit of the railroads, Abex stands ready to license any manufacturer to produce this superior Samson brake shoe.

If you would like additional information about the Samson shoe, contact your Abex representative. He's a good man to have working on your railroad.

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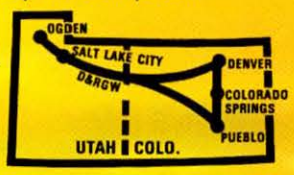
Where *is* all the action on the Action Road? Miles and miles down track. The Rio Grande's short, fast trains don't waste time in terminals. They shape up and ship out—no need to wait for 80 to 100 cars to string along. For shippers these trains offer all kinds of advantages. More efficient dispatching. More turnarounds per year on shipper-owned cars. Transit time cut by 30%. Softer, safer rides. Add the full complement of Rio Grande services—computerized car tracing, off-track pick up and delivery, special cars for special cargo—a total involvement in your distribution problems. That's the kind of action you get on the Grande, lively link between the east and far west.



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A RAILWAY AGE SPECIAL REPORT

THE MYTH... NATIONALIZATION ...AND THE TRUTH

"Those who look longingly at other countries' railroads—the nationalized ones—as paragons of efficiency and profit spend too much of their time gazing at the glamorized versions of foreign travel in the travel sections of their newspapers. They are not taking a hard look at the profit and loss pictures of these railroads. These are not so glamorous."

—John W. Ingram, Federal Railroad Administrator.

Almost nobody—if you can believe what you hear—is in favor of nationalizing the railroads.

Not labor. "We have always been against nationalization," declares United Transportation Union President Al Chesser. (And for good reason. See p. 36.)

Not management. "It is ridiculous to think in terms of nationalization as the 'solution' to the railroads' financial plight," says Southern Pacific President Benjamin F. Biaggini (pp. 30-31.)

Not shippers, who know that, in terms of equipment and service, there is often less than meets the eye on nationalized railways (pp. 32, 34, 35).

Certainly not Washington, which has had enough trouble quasi-nationalizing 200 passenger runs and is in no mood to take over 10,000 daily freight trains. "A real long shot," says DOT Secretary John Volpe.

Not the competition. "Nationalizing railroads would be only a preliminary to nationalizing the competitors of railroads," warns John A. Creedy, president of the Water Transport Association.

But there are also those—if you can believe what you read—who find nationalization far from unthinkable.

It was the fiscally-conservative Wall Street Journal whose page 1 headline just a few weeks ago raised hackles in railroad circles and eyebrows in Washington: "Government Chugging Toward Nationalization of America's Railroads." The implicit verb was not **may be**—but **are.** (The same paper, interestingly, reported earlier that Britain's "thriving" nationalized railways were earning a profit—a story which Lord Richard Beeching, former chairman of British Rail, clarified for Railway Age with the laconic comment, "The profit is accomplished by eliminating losses by subsidization." Simple arithmetic showed that Penn Central, given the same help, would be rolling in wealth—but the WSJ never got around to putting it that way.)

If not the unions, if not the managers, if not the shippers, if certainly not the taxpayer/consumer, then who stands to benefit from nationalization?

Oddly enough, Wall Street emerges as the likeliest beneficiary.

Alan S. Boyd, president of the Illinois Central and former Secretary of Transportation, observed some time ago that "it is entirely possible that bondholders and shareholders are groups that would derive **maximum** benefits from rail industry nationalization."

It is an open secret that Wall Street right now is doing the algebra on nationalization of Penn Central. Conference rooms are buzzing with speculation over what interest rate this or that bond might bear.

"Certainly, you're not going to find as much opposition to nationalization in Wall Street as you might expect," one senior investment officer commented last week. "My own worry is: Where will it end?"

Wall Street is not alone in its flirtation with takeover. There are consumer groups who genuinely feel that nationalization may be the only way out—for PC at the moment; after that, who knows?

It is, of course, Wall Street's right and obligation to try to protect the interests of its clients. It is equally the duty of the consumer organizations to defend their interests.

But those who have a broader interest in railroads than protecting a bond, or polishing up an intercity passenger train—those who want to preserve and protect what is still the world's most efficient freight transportation system, and one moreover that is a contributor to, not a burden on, the economy—have an even more compelling obligation to speak out.

It is in discharge of this obligation that Railway Age, on the following pages, examines some of the myths about nationalization that (1) persistently bedazzle those who see in its glamorous facade benefits for the many—or (2) give aid and comfort to those who, for short term dollars-and-cents reasons, do not care to look too closely behind this facade.

MYTH:

Nationalized railways often return a tidy profit to their "shareholders"

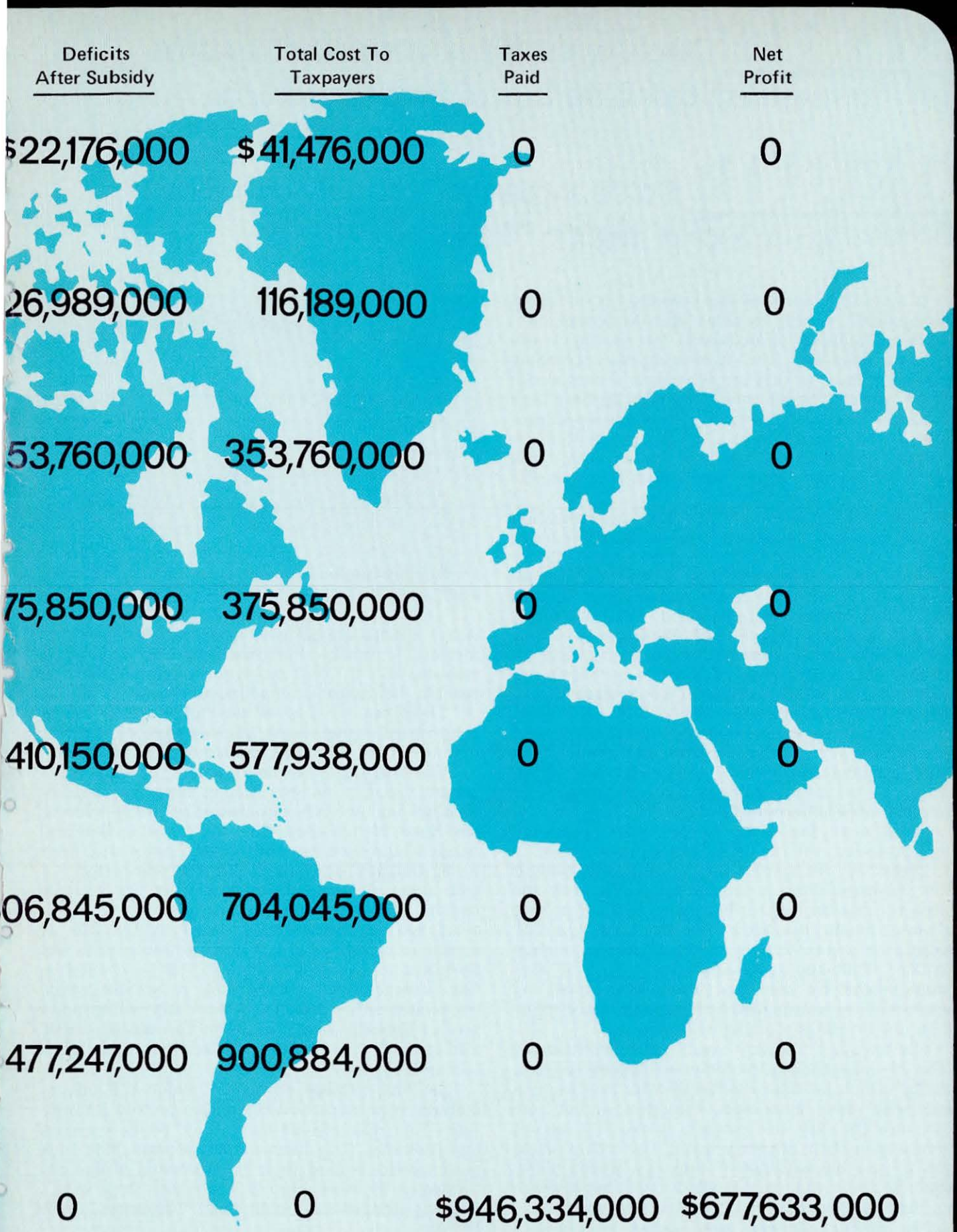
TRUTH:

Where rails are nationalized, taxpayers must make up staggering losses.

	Subsidy Payments
Netherlands Railways	$19,300,000
Canadian National	89,200,000
British Rail	—
Japanese National	—
Italian State	167,788,000
German Federal	397,200,000
French National	423,637,000
U.S. Class I Railroads	0

These statistics, and others used throughout this article unless otherwise specified, are for calendar 1968, the most recent year for which comparable figures are available due to changed methods of reporting. While the actual figures have now changed, the relationships remain much the same. For example, while U.S. railways earned less and paid smaller taxes in 1971, the French Railways' total cost to taxpayers that year rose to $1.2 billion. And British Rail is still deep in the red, despite a 1969 Act of Parliament which wrote off much of BR's debt and provided grants-in-advance rather than subsidies-after-the-fact. Not included in the U.S. figures are comparatively small payments made by public authorities to railroads in New Jersey, Pennsylvania and Massachusetts to help offset rising commuter-service losses. Biggest such payment in 1968 was $6,374,279 by New Jersey to five commuter roads.

Sources: International Railway Statistics (Paris), as extracted by Union Pacific researchers; AAR.



Deficits After Subsidy	Total Cost To Taxpayers	Taxes Paid	Net Profit
$22,176,000	$41,476,000	0	0
26,989,000	116,189,000	0	0
53,760,000	353,760,000	0	0
75,850,000	375,850,000	0	0
410,150,000	577,938,000	0	0
06,845,000	704,045,000	0	0
477,247,000	900,884,000	0	0
0	0	$946,334,000	$677,633,000

MYTH: Whatever losses they have to cover, taxpayers get their investment back in the form of cheap transportation.

TRUTH: It costs shippers (and ultimately, consumers) far more to ship a ton of freight in Europe than in the U.S.

It is easily established that even the best-managed nationalized railway systems cost taxpayers hundreds of millions of dollars a year in direct and indirect subsidies. The figures on the preceding pages, shocking as they are, may be understated. An SNCF officer, in an interview with Railway Age Publisher Robert G. Lewis in Paris a few weeks ago, placed the current cost-to-taxpayers of France's railway system at $1.2 billion a year, over $200 million more than at the time of the Union Pacific study.

Less easy to establish is what nationalization would cost U.S. taxpayers. Former DOT Secretary Alan S. Boyd, now chief executive of the Illinois Central, contends it would cost $30 billion to $100 billion just to acquire present shareholders' equities in current assets, materials and other holdings. George Smathers, former U.S. Senator who is now general counsel of America's Sound Transportation Review Organization (ASTRO), believes that on top of the initial outlay, taxpayers would have to pay out another $2.5 billion annually.

But a nation accustomed to pouring billions of tax dollars a year into concrete and rubber, and more hundreds of millions into airways and waterways, is not easily shocked by the prospect of pouring more billions into the trough.

"If it costs this much to get cheap, good rail transportation, then so be it," the argument goes.

Cheap? At the time of the Union Pacific study it was costing a French shipper (and ultimately the French consumer) more than twice as much to ship a ton of freight one mile by rail than it cost the U.S. shipper. It was costing nearly three times as much in Britain. While the comparatively low cost of shipping freight by rail has often been cited by economists as a strong anti-inflationary factor in the U.S., the reverse is often true overseas.

"In Europe," Railway Age's publisher reported after his inspection of nationalized railway systems, during which he talked not only with railway men but with their customers, "shippers accept rate increases the way homeowners in the U.S. accept increases in their property taxes. The traffic manager of one big automotive company waxed philosophical about this: somebody, he said, has to make up the losses incurred by unremunerative services.

"In Belgium shippers were socked with a 10% rate increase in 1971 and another 10% in 1972 for a compounded increase of 21%. The 1972 increase, announced late in February, was retroactive to Feb. 1—an interesting comparison with our own system where it is the shipper who is paid retroactively if an increase is finally disallowed. In Germany, rates went up 15% in 1971 and will rise another 10% on April 1, 1972, for a compounded increase of 26.5%.

"There are no shipper hearings. Protests follow the political route—about the way a taxpayer would have to protest a tax-rate increase in the U.S.

"Interestingly, the nationalized railways have greater freedom in establishing rates and services than do our own privately owned railways. A recent law gives Netherlands Railways total commercial freedom and they are using this to rationalize their losing freight operations. Over a five year period, NS will close all carload stations with unprofitable traffic. The 400 such stations maintained a few years ago are being pared down to 100-150. If service to private sidings is not profitable, rates will be raised to the point where it will be profitable. The national rate policy now is to publish 'maximum rates only—always at a level that will return a profit.' Beneath these, NS is free to negotiate rates. The railroad thus becomes a selective, rather than a common carrier."

Loss and damage claims? A major U.S. manufacturer who ships heavily in Europe told Railway Age: "Our railroads are much more ready to accept responsibility. The nationalized railways hide to a great extent behind their governmental affiliation. Consequently most shippers insure their shipments."

Computerized car location? It is the exception in Europe.

Most European shippers look as longingly at American rates, service and equipment as a handful of Americans look at the glamor of European passenger-train travel.

AVERAGE FREIGHT CHARGES PER TON MILE

	(cents)
United States (All Class I)	1.31
Canadian National Railways	1.32
Japanese National Railways	1.66
Netherlands Railways	2.07
Italian State Railways	2.40
French National Railways	2.83
German Federal Railway	2.88
British Railways	3.34

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we learn all we can about you.

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They learn the basics of the railroad business.

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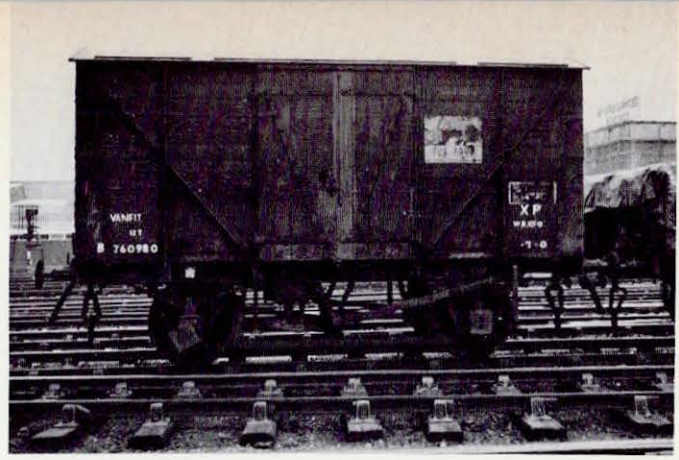
And how to plan communications for a railroad's immediate and future needs.

Our railroad school is just one of the ways that the American Telephone and Telegraph Company and your local Bell Company help fulfill the communications needs of your business and industry.

Because to talk to you, we must first speak your language.

AMERICANS OFTEN SEE THIS. . .
Trains like the TEE "Rheingold" are familiar to many Americans who view them as a compelling advertisement for nationalization.



. . .BUT RARELY THIS
What Americans seldom see are the vast fleets of small, ancient freight cars in which much European commerce travels.

MYTH: Europe's fine TEE trains are typical of the equipment nationalized railways offer both passengers and shippers.

TRUTH: Behind the TEE facade are those trains Americans seldom ride—and vast fleets of antique freight cars.

The passenger may be king in Europe; the shipper is treated less than royally.

An American transportation writer stayed overnight in Lugano, Switzerland, and went to the railway station the following morning to board the Trans-Europ Express "Gottardo" for Milan. Arriving early, he had time to watch half a dozen freight trains go past on this heavy-traffic line. His report:

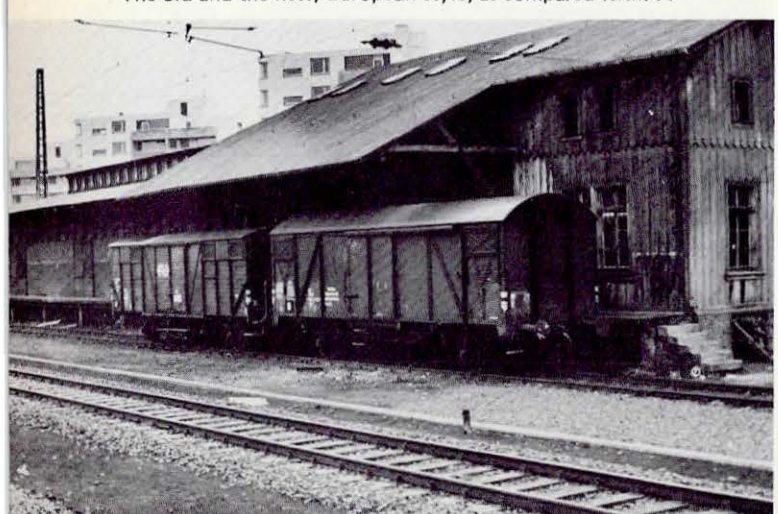
"The 'Gottardo' was everything the travel writers had led me to believe a TEE train would be—it was on-time, fast, clean, spacious, comfortable. Europe certainly has some passenger trains to be proud of.

"But those freight trains! Old cars, small cars. Mostly two-axle. No automatic couplers. Maybe half of them had roller bearings. No cushioning at all. You wouldn't believe it!"

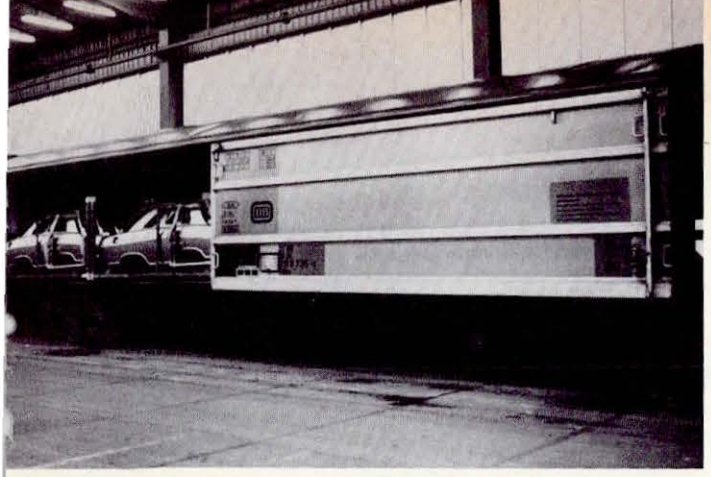
American railroad men and shippers who have traveled in Europe *would* believe it. It is taking nothing away from Europe's fine showcase passenger trains to suggest that they are just that—a showcase not truly representative of the vast fleets of older, run-down equipment, both freight and passenger, that Americans seldom read about.

The fact that some influential Americans view this showcase as a compelling argument for nationalization is especially worrisome to U.S. railroad men and their customers—who know that Federal takeover in the U.S. would involve not only passenger trains (and this has already been accomplished, for all intents and purposes) but 10,000 freight trains a day. The equipment that makes up these trains is the envy of the rest of the world; no

BY ANY MEASURE. . .
The old and the new, European style, as compared with. . .



PRIVATE ENTERPRISE DOES THE BEST JOB
. . .the old and the new, U.S. style. High-cube cars like the one below are still



IT ISN'T FOR LACK OF KNOW-HOW

There are also cars like this in Europe. But shippers who want specialized cars often have to purchase or lease them.

nationalized system has anything to compare with it.

It is not that Europe lacks the technology, or the will, to produce equipment like this. There are fine freight cars on nationalized systems; some of them are pictured here. But older vintages predominate.

The railways often protest, defensively, "but European shippers ship in smaller quantities than in the U.S." True, but there is evidence that this is more result than cause. There is also evidence that European shippers want bigger, better equipment. How do they get it?

For the shipper, the answer can be: Buy your own.

That is precisely what one big customer of German and Belgian railways is now doing. This shipper urgently needs the kind of high-cubic-capacity car which for years has been common on U.S. railways, but is still unknown in Europe. Such a car is on the drawing boards; the railways will not supply it. So this shipper decided to invest $5 million of its own capital in 150 of these cars.

Like other major shippers interviewed by Railway Age (so that valid comparisons could be made), this company also uses U.S. railroads heavily. The traffic manager comments: "We don't own one car in the U.S. The railroads provide them in order to get our business. But when you are dealing with a single nationalized carrier—one, moreover, where the passenger is most often the leading contender for limited investment capital—you do not have a lot of bargaining power."

n the drawing board in Europe.

One train the travel editors don't write home about...

You are in Paris and decide to try a representative Inter-City passenger service—not a TEE, which is all first-class with surcharge, but the kind of train 95% of Frenchmen would have to ride. You select Caen, a major French conurbation 147 miles west of Paris. A tourist bureau tells you second-class round trip will cost approximately $12 U.S., or almost 4 cents a mile. First class is 50% more.

You buy a second-class ticket and pay about 50 cents for a reserved seat on the 9 a.m. Saturday train. The train has a modern diesel locomotive and about 13 nondescript cars—two first class, one buffet-bar, the remainder second-class, all oldish looking, dark green.

Your reserved seat is in a compartment for eight. You have to sit backwards, squeezed in with three other passengers, and knee to knee with one of the four across from you. The train leaves on time, runs the 147 miles in two hours, 23 minutes, and arrives on the dot. You have abandoned your reserved seat two hours, 20 minutes ago and stood in the corridor all the way for greater comfort.

You return on the 12 noon Turbotrain. You find the French Turbo much like any other diesel railcar in Europe, but rather austere. The seats are fixed, half facing forward, and half backward, like some of Penn Central's suburban cars that commuters dislike so heartily. Performance is another story—France's Turbo is fast, quiet, makes the 147 mile run in one hour, 54 minutes with two intermediate stops.

So all trains in Europe are not in the TEE class. You can almost hear a U.S. railfan conceding the point, but adding: "Whatever kind of trains they are, Europeans still have them and they are getting more and more."

You dig into your briefcase and re-read what French railways told the New York Journal of Commerce a few months ago:

"Over the 1969-72 period, the government has committed itself to authorizing the closure or transfer to bus service of 6,200 miles of railway lines. In many instances this affects principally passenger traffic, and not freight.

"The closures or transfers to bus routes since 1969 of 2,000 miles of lines have sometimes produced strong resentment at local levels, with the government being flooded with petitions."

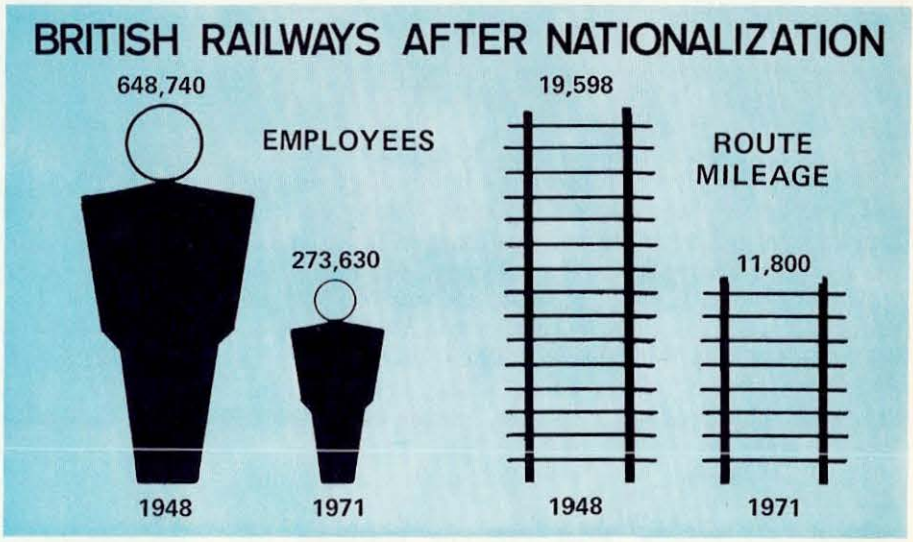
But, the French say, "no serious lobby has mushroomed."

Your conclusion: France is putting its trains where the demand is. Some of these trains are among the world's finest and fastest; others are not. Meanwhile, France has its own train-off problems. Altogether, not nearly as different from the U.S. as readers of the Sunday supplements might believe.

—Robert G. Lewis

MYTH: Nationalization provides job insurance for employees-and guarantees no further shrinkage of the railroad plant.

TRUTH: Since nationalization, British Rail has slashed employee ranks by 58%, and abandoned 40% of its route miles.



UTU President Al Chesser is firmly on record, in Congressional testimony, as opposing nationalization of U.S. railroads, which currently employ 164,500 of his members. Quite possibly, Mr. Chesser is familiar with what happened in Britain. The British experience is illuminating in that British Rail, unlike most other nationalized systems, went overnight from private to public ownership.

In Britain, the labor movement and certain financial interests were among the most ardent advocates of nationalization. On the whole, the financiers came out well. Long-term, low-interest bonds were issued by the British Transport Commission (later to become the British Railways Board) in the amount of $4.3 billion.

Labor fared not so well. Any hopes that takeover would preserve the existing plant and existing jobs were quickly exploded.

Between Jan. 1, 1948, the first day of nationalization, and Dec. 31, 1971, railroad employment in Britain plummeted from nearly 650,000 to less than 275,000. The number of route miles operated was lopped from more than 19,000 in 1948 to fewer than 12,000 in 1971.

And the chopping, the lopping continue.

"Axe or aid" was the way the Times of London described a recent British Rail financial crisis following an interview with BR Chairman Richard Marsh. Marsh, said the Times, was speculating that British Rail might have to be reduced to a trunk-route system of no more than 5,000 or 7,000 miles, "or half of today's network, not all of it necessarily connected together."

It is true that privately-operated railways carry no guarantee that a job, once created, cannot be destroyed. No one knows this better than Al Chesser and other U.S. rail union leaders. While employment on British Rail was spinning downward, employment on U.S. railroads was also in a decline. But the point is that nationalization in and of itself is no guarantee that a government railway system will become (as many older systems came to be, and still are to some extent) one vast employment agency.

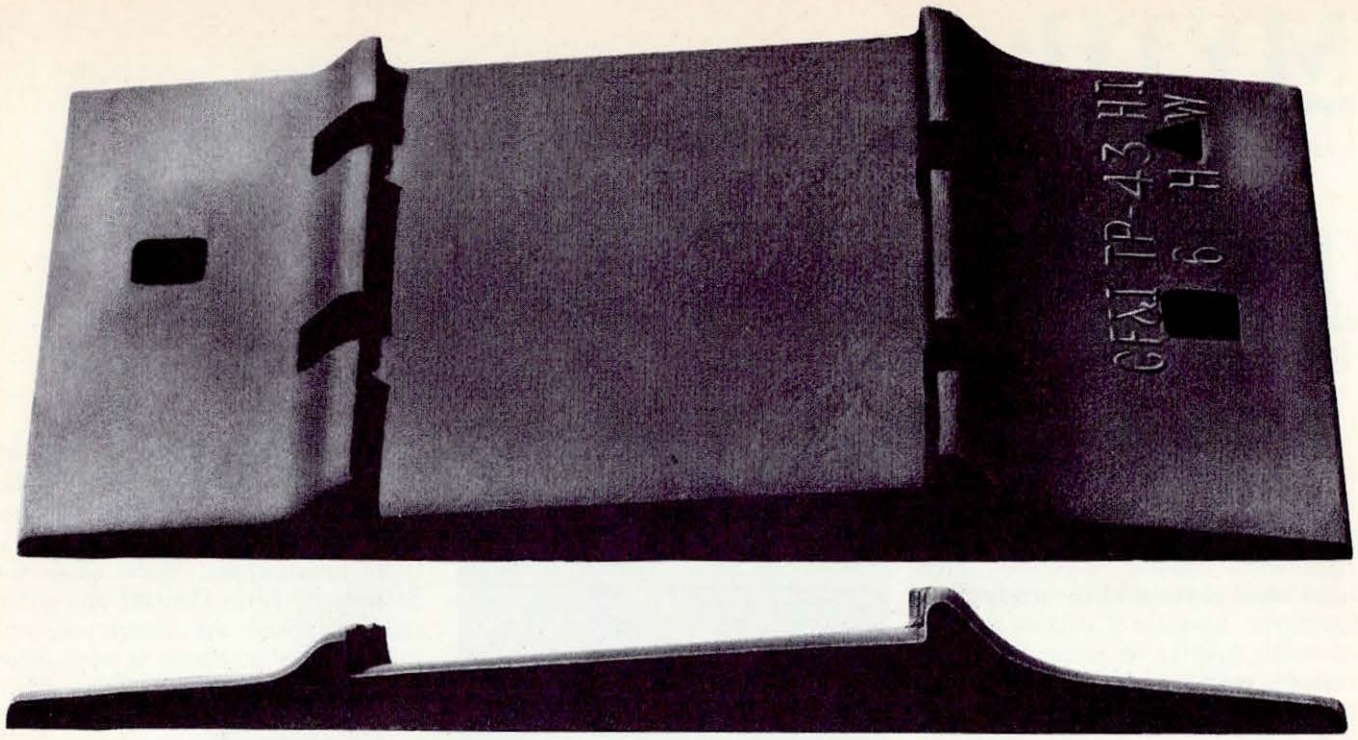
And there are other points to be made that are close to the U.S. railroad worker's heart—and pocketbook. Productivity—and bargaining power.

Working for an industry that is still, despite all of its well-publicized difficulties, operating well in the black, the average U.S. railroad employee today has annual earnings exceeding $11,000 a year, plus benefits. His counterpart in Britain and elsewhere overseas is lucky to get half of that.

A principal reason for this is that U.S. railroads, by any measure, are far more productive than any nationalized railway system—a circumstance which gives the U.S. worker a bargaining power undreamed of by most railroad workers elsewhere. In the most recent year for which comparable figures are available, U.S. railroads had 2.8 employees per track mile. The Netherlands had 13.3; France, 13.5; Italy, 18.7; Germany 21.6; Britain 25.5.

One explanation is the greater density of European railways. Equally important is the fact that for years many nationalized systems have tended to operate as shock absorbers for the national economy, often resembling nothing so much as a public relief project. All over Europe, as in Britain, the railways are now furiously trying to correct this. And the unions are finding that loss-weary governments can be tough bargainers.

The big question for U.S. railway unions now is this: Will they help, even at some immediate sacrifice, to carry out the kind of reforms which Penn Central says are immediately necessary to prevent its own takeover? Or will they, in order to protect a handful of jobs now, risk the loss of many jobs later?



CF&I's Plate of Progress

Any way you look at it, the CF&I Hi-Cant tie plate is truly a plate of progress. Since 1968, sixteen major carriers have installed CF&I patented Hi-Cant tie plates on more than 200 heavily travelled curves. Results to date: improved rail performance and extended rail life where Hi-Cant tie plates have been installed on the high side of curved track.

The principle is simple. The standard tie plate has a 1:40 cant. Our Hi-Cant's additional 2° 45′ angle allows the high side rail to present a stress distribution and wheel bearing area approximating that of a tangent track.

Laboratory research and extensive field studies of Hi-Cant's 1:14 slope have proved the rail head carries the wheel load more evenly. This eliminates or sharply reduces shelling on curves and greatly reduces rail wear through the improved wheel to rail relationship.

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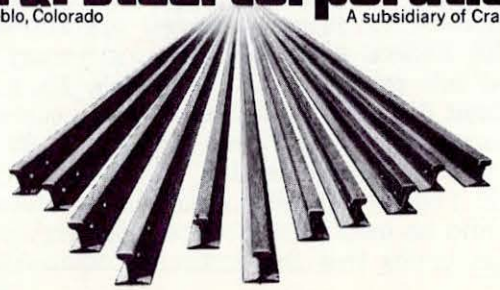


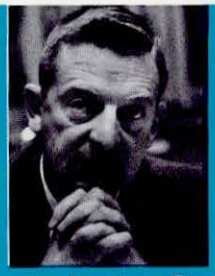
Circle 17 on coupon page 67

MYTH: Whatever the pitfalls of nationalization, U.S. rails are in such trouble that there is no alternative.

TRUTH: Takeover would only shift problems to the taxpayer, and solve none of them. There is a better way...

The most subtle and insidious of all the pro-nationalization arguments—subtle, because it implicitly accepts all of the other arguments *against* takeover, and then casts them aside as irrelevant; insidious, because it carries a grain of truth, insofar as some troubled eastern carriers are concerned—is this: That however perilous and costly the takeover route may be, the U.S. has no choice but to try it, because "we cannot let our railroads go out of business, and our railroads cannot make it on their own."

This argument is used persistently by those who view the U.S. railroad industry only, as SP President Biaggini has so vividly put it, through the dirty window of an eastern commuter car; or, more to the point these days, through the murky pages of a Penn Central financial report.



—Burlington Northern Chairman Louis W. Menk

"Nationalization of the railroads would create a spectre to haunt all major businesses and utilities."

Is Penn Central hopelessly a candidate for government ownership and operation? Is the railroad industry as a whole in such bad shape that it must inevitably follow?

The facts are these:

(1) The Penn Central Transportation Co., in reorganization for nearly two years, continues to tread deep financial water, and there is the distinct possibility that massive government intervention may be needed to bail it out. There is, however, a large body of responsible opinion (including the Departments of Transportation and Justice) that agrees with the present thinking of PC's trustees that the railroad can be reorganized as a viable, tax-paying corporate citizen, given some of the breaks that most nationalized systems have already won. Specifically, PC wants the freedom to prune away uneconomic lines and unneeded positions; and full reimbursement for losing passenger operations for which the Federal government has, in theory, now assumed full responsibility (RA, Feb. 28, p. 11). The loudest dissent to this plan so far has come from an insurance company that wants PC discharged immediately from Section 77 protection, and "interim" Federal subsidies granted to protect assets that could be used to pay off pre-bankruptcy debts. Such as bonds that this insurance company holds.

(2) The U.S. railroad industry as a whole is far healthier than most people realize who do not read beyond the scare headlines in their newspapers. Even after the deficits of Penn Central and other red-ink roads are deducted, the industry as a whole is still operating at a net profit. That profit was $391 million in the most recent 12-month period for which all reports are in. That same industry, in that same period, carried more than 40% of all intercity freight in the U.S., piled up revenues of more than $12.6 billion, invested $1.5 billion in capital improvements, spent as much again on operating materials and supplies. And paid taxes. (Compare this with the one period when U.S. railroads were under government operation, in 1918-19: They lost $2 million a day.)

What, then, is all the fuss about? The answer is that despite their over-all health, U.S. railroads *are* in trouble; they need help, they have asked for it, and some people have over-reacted.

Because this country's railroads must function as a single system, not as 70 separate entities, the ailing roads must be restored to health—and the medicine may have to be strong, as suggested by Penn Central trustees. The alternative, nationalization, would in itself cure none of these ailments, but simply transfer them to the taxpayer.

And the stronger railroads, with a return on investment that averages out at less than one-third of that which is guaranteed to other regulated utilities, urgently need new sources of capital to renew and rebuild themselves for the task ahead.

Not many people seem to know it—but it was not unprofitability that drove British railways into nationalization. Nor was it default on financial obligations. It was mainly the fact, according to Richard Marsh, present chairman of British Rail, that "the railways found it extremely difficult to raise the new capital which they required for modernization of equipment."

The British answer was nationalization.

American railway men, along with key members of the Congress, think there is a better, and cheaper way out. It is embodied in the Surface Transportation Act now before Congress.

THE CHEAPER, BETTER WAY: Page 84

We promise to love, honor and cherish your small shipment...and deliver it on time.

The small shipment. We know how much it means to you... and we care about it, too.

That's only the beginning. We'll give it LTL/LCL service including split delivery, reforwarding rates, local pickup and delivery, container stuffing and stripping... as long as we both shall live.

We'll handle it in a manner even better than to which it's been accustomed and always give it the best of everything, including six piggyback plans (with Plan V interchange agreements with more than 400 motor carriers), gentle handling in modern terminals, an easy ride in our 3,000-unit highway fleet. We also have piggyback ramps at 68 locations and cranes at 17 cities.

Mo·Pac. Someone you'd trust with your small shipment.

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Missouri Pacific Railroad
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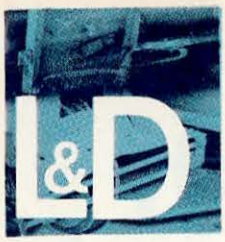
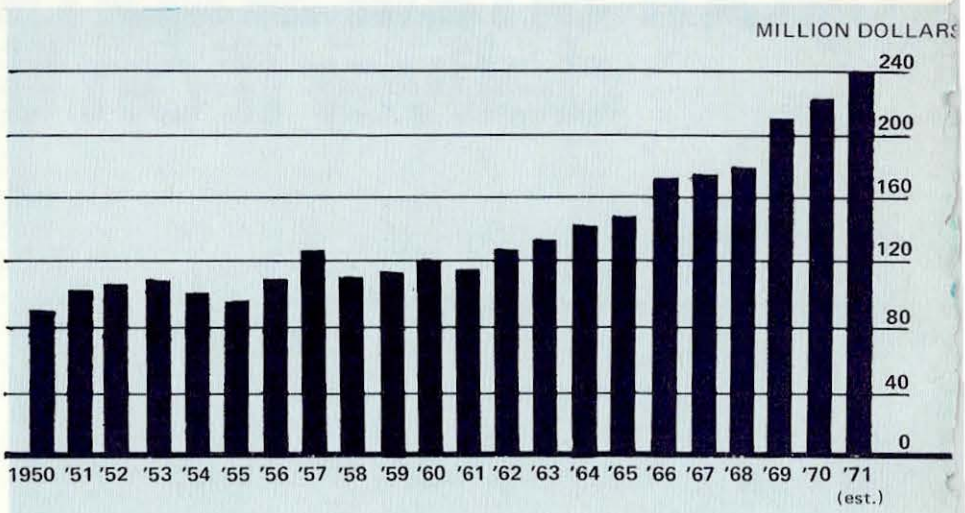
Circle 19 on coupon page 67



In a still-gloomy L&D picture

Successful attack on appliance L&D shows that given the right approach, and the right tools, the problem can be controlled.

By GUS WELTY, Senior Editor



FREIGHT LOSS & DAMAGE PAYOUT
1950–1971 AAR FCD

In the sometimes-murky world of rail freight loss-and-damage prevention, there are at least a couple of things that can be said for sure:

—Claim payout is still going up. Final figures are not yet in on 1971, but $240 million is a fair estimate. That makes 1971 the 10th straight year of increase in dollars paid out for lost and damaged freight. It also means that payout has doubled between 1960 and '71.

—Where L&D-prevention activity can be concentrated and where prevention efforts can be conducted on a coordinated basis, improvement in the record *can* be achieved. Payout on damage to household appliances is a good example: With better prevention tools to work with and with what amounted to a nationwide carrier/customer effort, claim payout dropped from about $8.7 million in 1969 to $6.4 million in 1970. The '69-'70 comparison also yields up other positive showings, on such commodities as sugar, plywood, furniture, newsprint and on forwarder traffic. Payout in all of these areas (including appliances) added up to $33.2 million in 1969. In the following year, it dropped by $6.9 million to $26.3 million. And one thing that these commodity-areas had in common was that each was the subject—or object—of a specific prevention drive. (While payout in these areas dropped sharply, it might be noted, total payout rose from $210 million to $228 million.)

What do available figures indicate about 1971? On a nine-month basis, they show payout of $181.7 million, up by 5.9% from the similar period in 1970. For the 12 months ended last Sept. 30, they peg payout at $238.4 million, up by 5.2% from the preceding 12-month period. The only really positive figure is the one reporting new claims: For the first nine months of last year, about 150,000 fewer claims were filed, for a reduction of 7.5% from 1970 totals for the comparable period.

• Looking at '72—and beyond. What do trends indicate about 1972, and the future? They *seem* to indicate that payout will continue to go up and up, with a continuing dollar-drain and with L&D becoming an increasingly sore point with customers.

The experts in L&D prevention insist that this doesn't have to happen. They'll point to what *can* be done by pointing to what *has* been done in a few areas. They'll ask for more authority and for more money. And they'll hope that somebody's listening.

Actually, an outside observer might conclude that investment in L&D prevention could be one of the industry's better bargains. Looking at the over-all cost of the household-appliance program, for example, it's hard to see how expenses could have run every high—at a guess, say $150,000. And while it's impossible to make a direct cause/effect case, payout did drop by 15 times that guesstimate investment—and the experts are convinced that the extra effort, more than anything else, did it.

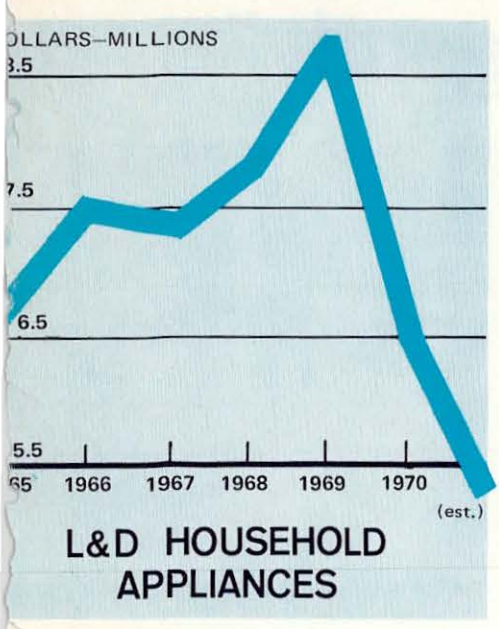
Actually, too, an outside observer might conclude that railroads have been getting pretty much what they could have expected—for allowing L&D prevention, over the years, to be a sometimes-less-than-top-priority thing. And for that, perhaps both management and L&D-prevention people themselves can share blame.

• Payout, and how it grew. For one thing, as a 20-year plot of L&D payout shows, the 1950s were an up-and-down period. From the $90-million range in 1950, payout climbed only to about $120 million in 1960, and there were several years during the decade when an actual dollar improvement was reported. But that all changed in the early 1960s. And what might somehow have been considered a "normal cost of doing business" was no longer such.

Some question also might be raised regarding the effectiveness of past approaches to L&D-control, by individual roads and on a national basis. The impression is left that L&D prevention, in past years, was a sometime thing—to be trumpeted during a so-called "perfect shipping" month, when posters appeared in yard offices and crew locker rooms, when operating employees were lectured, admonished and otherwise instructed to be careful of the customer's freight.

Then, too, there is the matter of organization. On the national level, for example, that section of the AAR responsible for preventing loss and damage is a part of the division responsible for—or rather, concerned with—the claim-handling aspect of the problem. Some observers might regard this as a juxtaposition of cart and horse—or at least as a linking of agencies with less than a lot in common in terms of function.

one bright spot stands out



L&D HOUSEHOLD APPLIANCES

Individual-road organization charts are something else again. So far as authority, duties and reporting responsibilities are concerned, the only pattern seems to be no pattern at all. While some roads are excellently set up to get the job done, some apparently aren't—and prevention specialists find themselves in a bind: On the one hand, they're fighting the continuing battle of the budget (and only sometimes winning); on the other hand, their own effectiveness (their own proof-of-value to management) can be watered down because they're called off L&D work to perform other chores or because they find it difficult to get needed action through normal channels of authority.

• **Always, the people problem.** One aspect of L&D prevention—actually, it may be the toughest of all to cope with—is the tremendous number of people who have to be convinced that L&D prevention is actually important. The line starts with the shipper, stretches through in-transit handling and winds up with the receiver—and at each stage there is the potential for damage that may wind up in a railroad's payout column.

And while many roads have done a creditable job of training and motivating employees, much obviously remains to be done. For instance: It's a commonly-held belief that damage could be sharply reduced if only all yard crews would switch cars so that no car got more than the magic 4-mph impact. No doubt this is true. But equal attention should perhaps be paid to over-the-road train-handling. One road's recent studies, with recording instruments installed at the rear of trains, recorded slack-action impacts as high as 14-mph equivalents. Even the worst yard seldom switches with that kind of force.

• **L&D and "quality."** If L&D people were to start listing what they need to bring a turnaround in the decade-long uptrend in L&D payout, chances are that high up on the list would be one big item: The feeling that "somebody cares," as reflected in top-management dedication to the principle that L&D prevention is a vital element in the oft-talked-about "transportation quality control."

It's apparent that this kind of feeling does exist on a number of properties. There *are* roads that can report declines in payout as a percentage of gross, for example, and this is one fair measure of how seriously prevention efforts are being taken. And, hopefully, the feeling is spreading. To an increasing extent, top management is not only verbalizing its commitment but also backing it up by its actions. As just one example: Santa Fe.

About a year ago, President John S. Reed reflected on his road's then-new approach to the problem: "Ever since I've been with the railroad, things such as safety and freight loss and damage prevention have had high priority. But, for one reason or another, our efforts were not being translated into performance the way we thought they should be. So we are taking new approaches. . .But what this means, simply, is that we will be making it clearer than ever that we do mean business, and that it is vital that we show improvement—for the financial integrity of the railroad and the job security of all concerned."

Vice President-Operations Larry Cena has been blunt about the goal of the "new approach": He won't be happy, he says, so long as there's *any* loss and damage. And if you challenge him about the "impossibility" of getting down to zero, like as not he'll tell you "Then I'll never be completely happy."

Santa Fe's new effort is being controlled from high up in the operating department. And a key factor in it might be summed up in two words: Action—now. Much the same principles—get on top of a problem, stay on top of it, make people know you're on top of it—were applied a few years ago to safety, and in terms of the personal-injury record Santa Fe went rather quickly from an also-ran to an award-winner among major roads. It's still too early to get a good grasp on results-measurement, but Santa Fe—and a number of other roads besides—will be watching performance closely.

• **Government, too.** As time passes, L&D (and claim) specialists will also be casting an eye in a couple of other directions—specifically, at DOT and the ICC. Each has had something significant to say about L&D and claim problems—and the impact could be substantial.

DOT's observations came in a so-called "exploratory study" made last year for the Transportation Department's Office of Policy Review. Its recommendations:

—DOT should sponsor a number of prototype economic and management studies designed to assist carrier management in a number of ways. Included would be development of procedures for finding sources and causes of L&D in an organization "and relating these to management responsibility centers."

—DOT, perhaps in cooperation with other Federal agencies, should work with carriers in programs to control L&D in interchange traffic.

—DOT should consider sponsoring legislation to establish public or private arbitration services and to provide for the regulation of such services.

With DOT involved in the L&D problem, government-watchers knew the ICC would have something to say—and on Feb. 24, it did, in a case (Ex Parte 263) that had been opened two years earlier.

Trigger for the inquiry was a shipper petition relating to the lawfulness of then-new rules for handling claims on concealed L&D. The ICC, however, made 263 into an all-aspects investigation—and in its order last month (RA, March 6, p. 8) it not only struck down the concealed-L&D rules but also came up with a new regulatory/legislative package. Included were new rules regarding handling and disposition of claims, and two legislative proposals—one which would give the ICC authority to settle disputed claims, and a second which would lead to requirements that carriers maintain adequate cargo insurance.

Carrier to customer: "Treat our freight cars gently"

What is the *real* cost of loss and damage? First there is the actual payout, which may have hit (or topped) $240 million last year. There is the cost of maintaining claim departments and the cost of handling disputes, in court and otherwise. There is the cost represented by lost revenue and profit when a shipper throws up his hands and deserts the railroad for some other form of transportation which, he hopes, will bang up his merchandise less.

And then there's an often-forgotten cost—one which bears upon railroad and customer alike. That is the cost—now running about $75 million to railroads alone—of damage done to expensive equipment while it's in the hands of shippers and receivers. In absolute dollar terms, this is an expense to the railroad—but there is also a real cost to the user, because he is being deprived of needed cars while they are in the shop being fixed.

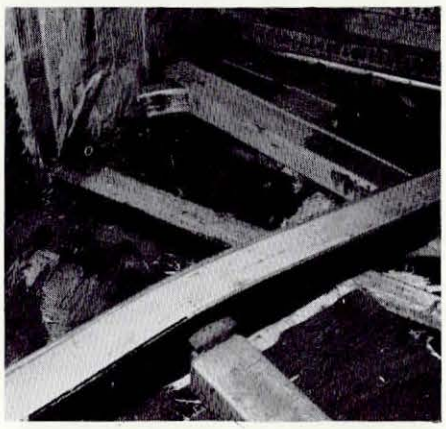
In the past, railroads have been a bit reluctant to bear down on this problem—but no more. Now, it's out in the open. Over the next few weeks and months, shippers and receivers by the thousands will be handed copies of a brochure aptly titled "A $75,000,000 Problem: What Can Be Done About It?" At last count, the press run for "Problem" topped 300,000. Railroad people will be urging industrial traffic managers to study it. They will also be strongly suggesting that their shipper and receiver friends get copies of the brochure out on the loading and unloading docks, where the damage is actually done.

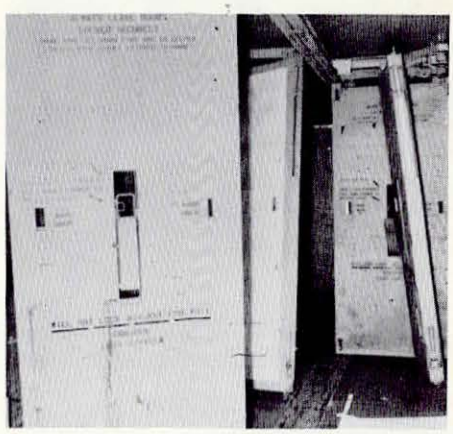
The basic message is a simple one: "Those who need and use rail freight service are being deprived of the use of thousands of freight cars every month and are paying higher freight rates because many shippers and receivers are needlessly damaging these cars. . .A little thought and care can save everyone—shippers, receivers and railroads—time and money. Elimination of this careless and needless damage to freight cars and the consequent need to remove them from service for repair can result in an almost-immediate increase in the supply of freight cars of all types."

With minimum use of words and maximum use of photos, the brochure shows both the right and the wrong way to do things. There are horror photos of what happens when a shipper loads a car carelessly. . .when a receiver fails to properly stow and secure lading-protection devices. . .when shipper or receiver makes improper use of a forklift or tractor to open a door or move a car. There are also "right-way" photos. Predictably, a lot of attention is devoted to specialized equipment. But the brochure also covers the many ways in which "standard" cars can be knocked out of service.

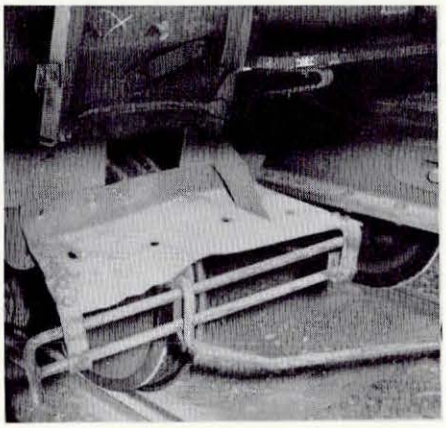
Reaction to the brochure has been excellent. Railroads have been lining up to place their orders. Individual shippers—among them such giants as International Paper, FMC Corp. and du Pont—and the NIT League have ordered.

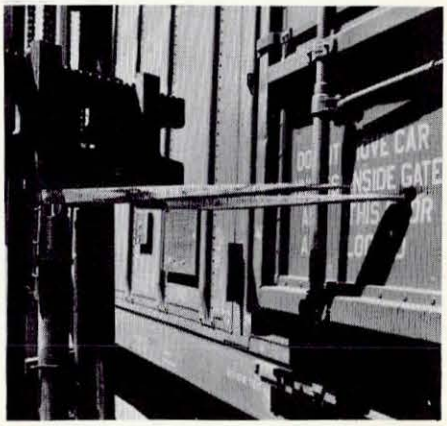
Southern Pacific can be credited for kicking off the campaign, via a booklet which SP people put together for their own use. As a national thing, the project was coordinated and developed by public relations/advertising officers from the three regions—R.D. McIntyre of SP, Woodson Knight of Louisville & Nashville, and Ralph Timbers of Penn Central. Copies of the brochure are available from the Traffic Executive Association-Eastern Railroads in New York, the Executive Committee-Western Railroad Traffic Association in Chicago, and the Southern Freight Association Executive Committee in Atlanta.





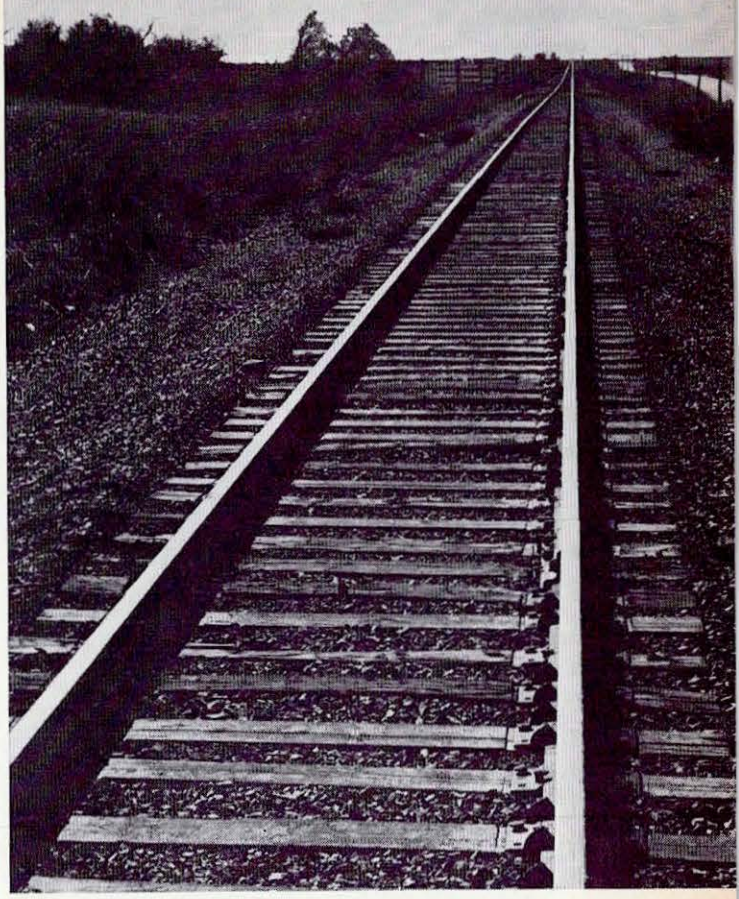
GRAPHIC PROOF from "A $75,000,000 Problem": What better way to show loading/unloading personnel what happens when (1) crossbars are not properly stowed and secured, (2) load divider doors are left unlocked, (3) tow cables are hooked to ladders and uncoupling levers, and (4) a fork-lift becomes a handy car-door opener? In each of these instances, a valuable freight car has to be idled for repair—when just a little more care would have kept it running.





SAFE
This stretch wasn't long enough!

UNSAFE
This stretch may be too long!



Our new rail-mounted SERVOSAFE® Hot Box Detective™ prevents axle burn-offs and derailments.

It's a good thing to have on your railroad.

But, for safety's sake, don't stretch a good thing!

Do you have long stretches of track without SERVOSAFE protection?

Recent studies have revealed that such factors as heavier car loadings, faster train speeds and greater accelerations have combined to increase the incidence of overheated journal boxes. This has prompted many railroads to review their spacing of hot box detectors. Up to now, the average spacing has been 25 to 30 miles apart along line-of-road. Under today's conditions, however, a hot box can develop in less than 25 miles and cause a derailment *between* detectors.

One solution becomes self-evident: closer spacing of hot box detectors for more protection. A SERVOSAFE system will not prevent a hot box—but it will detect, locate and warn of a hot box before the condition worsens into a dangerous, costly axle burn-off and derailment!

Will it cost you more to get this additional SERVOSAFE protection? Not really. Here are some reasons why not:

Our new Model 8808 SERVOSAFE system features patented rail-mounted scanners and solid state electronic data processing for the fastest, most precise detection of hot boxes. It allows remedial action to be taken *before* a failure occurs, and helps cut down the high costs of major salvage or replacement. The cost of installation and maintenance is appreciably reduced by eliminating the need for concrete foundations, special ties and expensive roadbed preparation. The rail-mounted scanner can be easily removed for maintenance or relocation. Finally, compare the cost of a SERVOSAFE with the $200,000 involved in just one derailment that could be prevented.

That's why most prudent, progressive railroad managements agree when we say, "More SERVOSAFE protection isn't costly—*lack of it is!*"

Model 8808 SERVOSAFE Hot Box Detective Rail-mounted scanner "looks" at journal bearing behind truck frame with a vertical, close-in target scan for greater uniformity and accuracy. Scanner is securely clamped to the rail (no drilling required). Accuracy is not affected by rail pumping, running or lateral movement.

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Serving Safety Through Science

Since 1957, more than 1,000 SERVOSAFE Hot Box Detective systems have been put into service on 54 of the world's major railroads, and have compiled an unequaled record of safety improvement and cost reduction.

Circle 20 on coupon page 67

MEMBER RPI

Stanray roofs handle a lot of stress with very little strain.

Stanray Box Car Roofs are subject to very little strain because the X-Panel (shown above) and the Diagonal Panel Roof are designed to resist the two greatest stresses—twisting and racking.

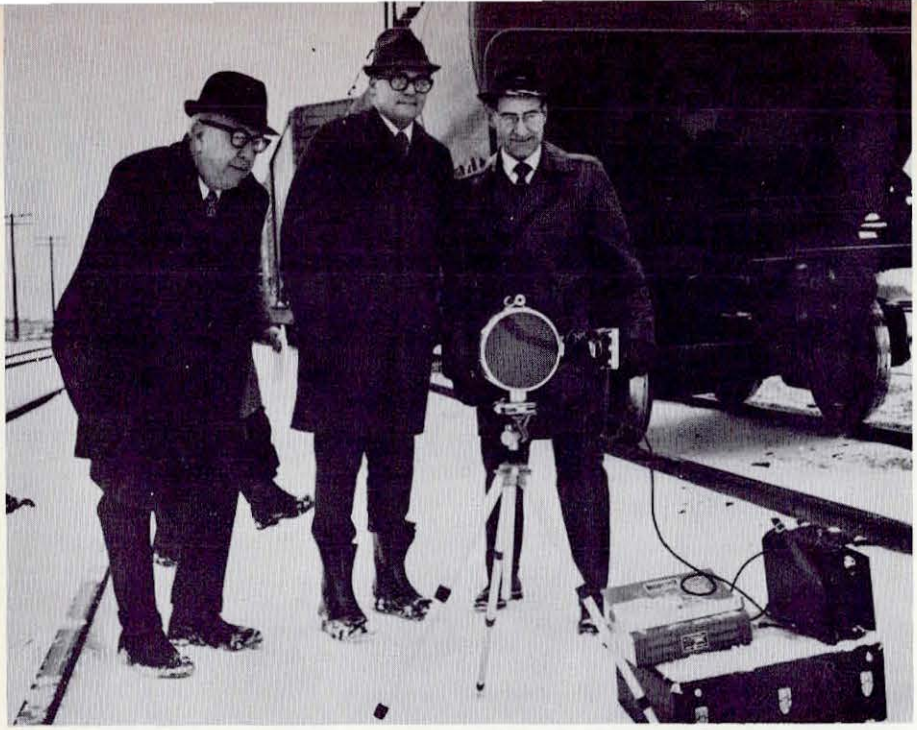
That's especially true of the X-Panel Roof with its 61½" panels instead of the normal 41". That means fewer panels to twist and move, and approximately 33% fewer seam caps, which means less chance of leakage. Installed by welding or riveting (your option).

Either the X-Panel or the Diagonal Panel Roof will provide maximum stress resistance and waterproof, dustproof protection for your lading. Provide longer life for your box cars, too.

Contact your Representative today and ask about the roofs that handle a lot of stress with very little strain.

STANRAY CORPORATION
STANDARD RAILWAY EQUIPMENT DIVISION
Hammond, Indiana • Chicago, Illinois
IN CANADA: Davanac Industries, Montreal, Quebec

Circle 21 on coupon page 67



BEFORE IMPACT, the radar unit gets a check by Santa Fe Manager-Traffic Horace W. Elliott, Admiral Traffic Manager Robert Burke and Santa Fe District Sales Manager Paul O. Rice.

L&D How Santa Fe and Admiral "get it there safely"

THEN, WITH AN 8-MPH IMPACT, the snow flies. Door was left open to permit observation.

Sometimes it seems that the battle against freight loss and damage is an endless progression of slogans—and an endless proliferation of committees. The slogans are soon forgotten—and the committees might just as well be.

But that's not the way it is in Galesburg, Ill., at the Midwest Manufacturing Division of Admiral Corp., a plant that turns out refrigerators and air-conditioning units by the thousands, and a plant that ships about 85% of its production by rail. At Midwest, the slogan is the committee, or the committee is the slogan (whichever you prefer)—and the whole operation is geared to the goal expressed in the name of the plant's L&D-prevention group: the "Get It There Safely" Committee.

• **Good record made better.** On a national basis, considerable progress has been made in slashing the L&D bill on appliances. The so-called "white goods" industry has been made a major target of prevention efforts of the AAR's Freight Loss and Damage Prevention Section, and claim payments have been going down. But there are indications that Midwest's program is paying off with improvement well in excess of the nationwide improvement: Santa Fe switches the Galesburg plant and is a major carrier of Midwest's appliances—and preliminary figures for 1971 show that Santa Fe claim payments on Midwest traffic are down by about 45%, while the traffic itself showed an increase in volume.

Obviously, somebody was listening when Santa Fe Vice President-Operations Larry Cena warned that "I won't be happy until loss and damage is completely eliminated." Just as obviously, Midwest's "Get It There Safely" group is doing an excellent job in measuring and then trying to correct problems.

Midwest's committee came into being about a year ago. Frank Erdman, director of product assurance and design reliability, was named chairman. Other members of the panel were the plant's traffic manager, warehouse manager and packaging engineer. Their first aim was simply to identify causes and magnitude of product damage—and they recognized at the outset that it was both unfair and inaccurate to blame all damage on the railroads.

• **Where damage occurs.** Six areas, or causes, of damage were identified—inadequate pack design; improper pack assembly; in-house handling; loading techniques; in-transit handling, including transshipment warehousing; and destination handling. The next step was to begin an inspection program—on a random-sample, unbiased basis—of products at each of the six stages of the distribution process.

As its benchmark-for-quality, the committee developed a "consumer's ac-

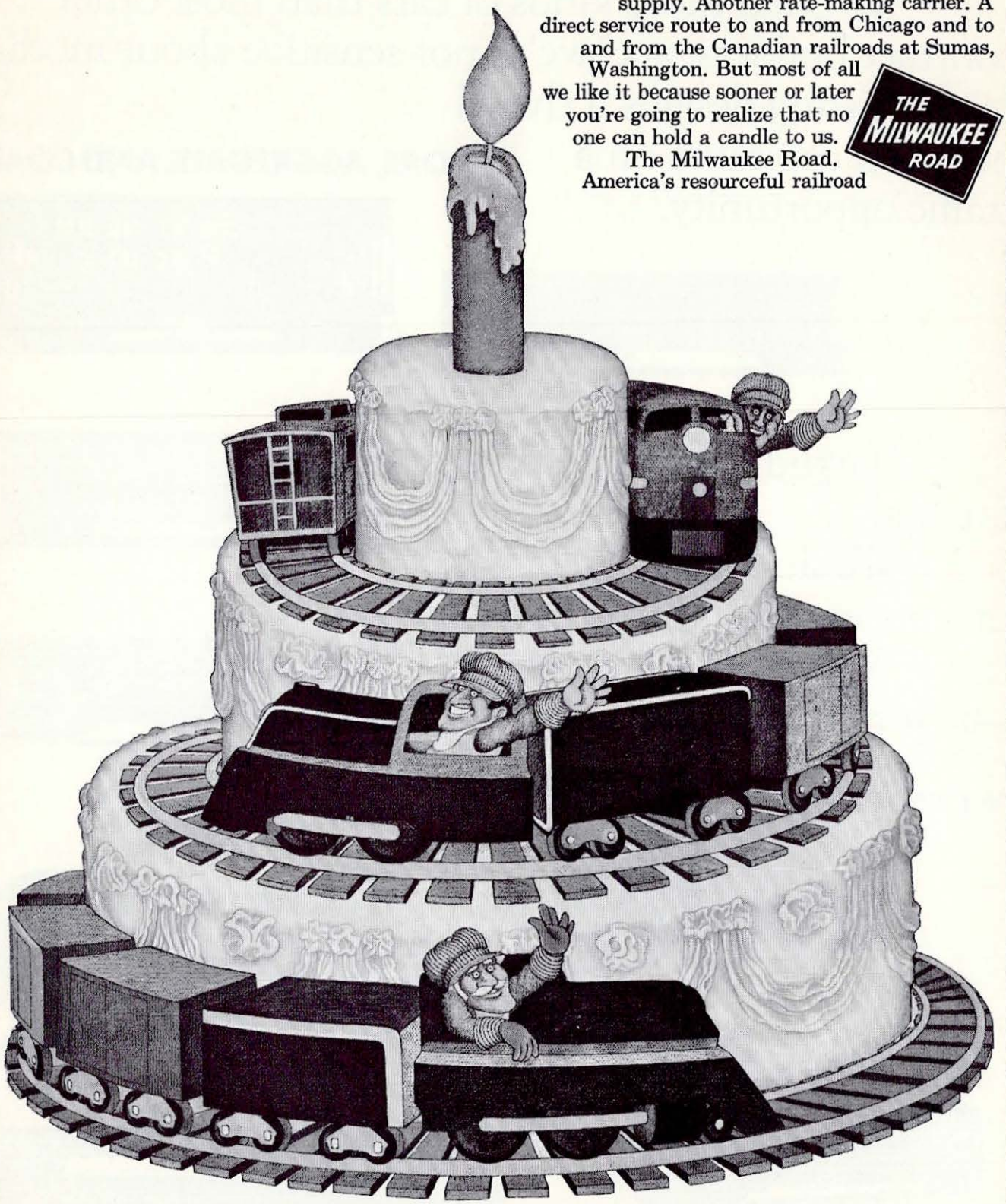
(continued on page 50)

HAPPY ANNIVERSARY.

We've been full-fledged residents of Portland for a year now and we like it a lot. We like it because *you* get the "presents". An additional choice of competitive rail transportation. A new source of equipment supply. Another rate-making carrier. A direct service route to and from Chicago and to and from the Canadian railroads at Sumas, Washington. But most of all we like it because sooner or later you're going to realize that no one can hold a candle to us.

The Milwaukee Road.
America's resourceful railroad

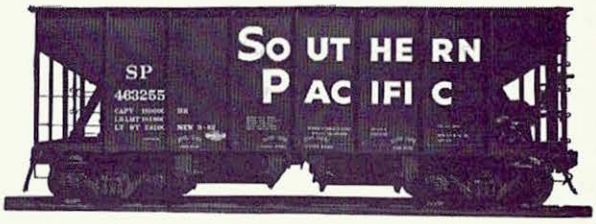
THE MILWAUKEE ROAD

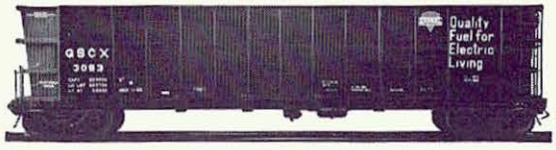


If you're trying to abreast of market and product

We build more kinds of cars than most other contract builders, and we're not sensitive about modifying existing designs if they'll help you capitalize on a traffic opportunity.

ORE, AGGREGATE, AND COAL



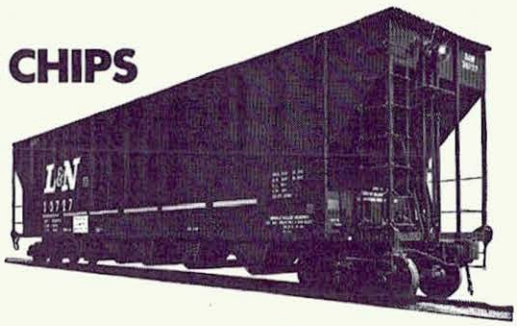


We did it in unit trains for coal.

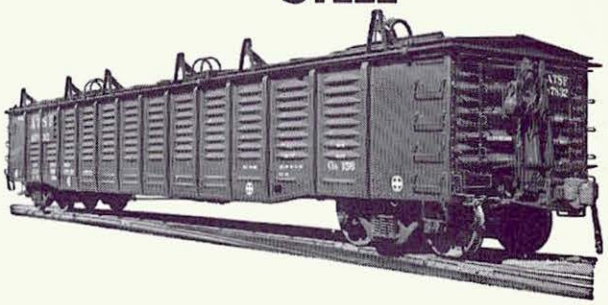
We do it to keep abreast of the new steel mill products.

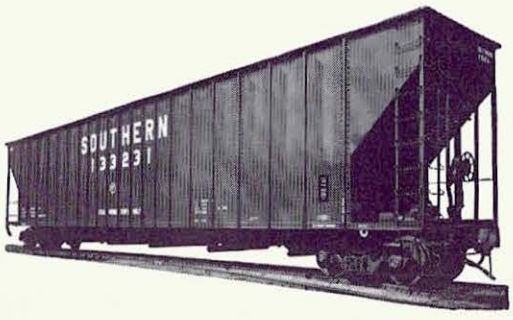
We're doing it with cars for aggregate service.

WOOD CHIPS



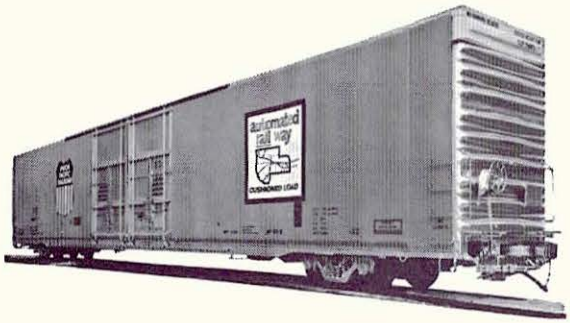
STEEL



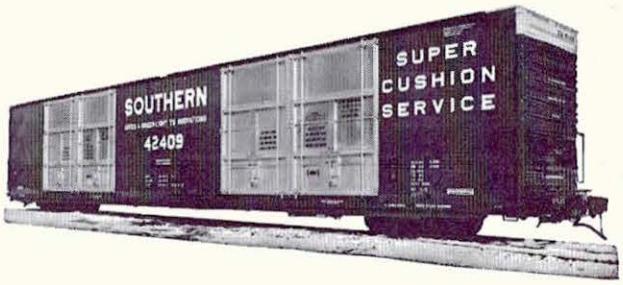


keep your car fleet changes...Greenville can help.

We move fast, build well, and we're often a step ahead.



HIGH CUBAGE



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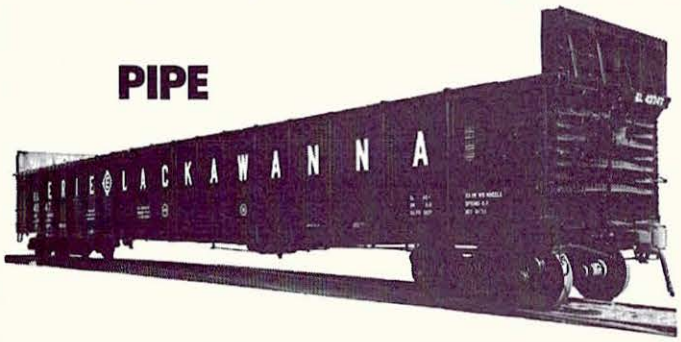

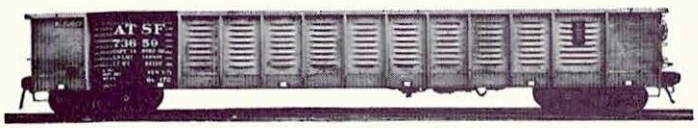

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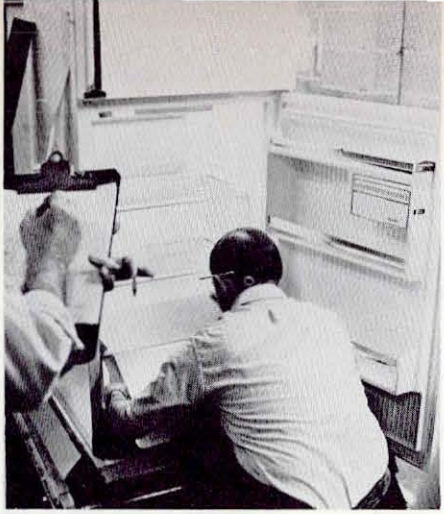
Circle 22 on coupon page 67

INSPECTION OF PACKAGE is first order of business for Elliott and Frank Erdman, Admiral Midwest director of product assurance.



TECHNICIANS REMOVE the packaging and begin an extensive series of tests to determine how the refrigerator looks.

MEANWHILE, BACK AT THE PLANT

FINALLY, J.H. Baker, chief quality control engineer for Admiral, goes over test results with Richard W. Wells, manager of quality control for Santa Fe.

(continued from page 46)

ceptance test" (CAT) with 25 separate inspections, covering such things as exterior package, door alignment, outer case finish, leak checks, compressor check, noise acceptability. Unintentional bias is ruled out by the way the tests are made: At the plant and at destination points, they're conducted by one man, C.E. Shaub, quality control technician, along with either Erdman or J.H. Baker, chief quality control engineer.

The course of the tests runs this way:

—Packaging design and assembly is checked against ASTM test procedures. This is a continuing process, and design and assembly have been found to be well within limits. Last year, for example, 2,742 products were random-selected as they came off the line, re-opened and checked against the CAT. In these ways, Midwest established damage-magnitude for the first two categories of damage-cause.

—Other checks (involving 483 units in 1971) are made just before loading. The difference between CAT scores before and after these tests established the average magnitude of damage for the third category, in-house handling.

—Tests on the fourth category, loading techniques, involved removal of random-selected units from rail cars immediately after loading. Again, in building-block fashion, average damage-level was determined under the CAT by comparing scores at this stage with averages developed from the tests in the earlier categories.

—In-transit damage levels (of which, more later) were determined in straightforward fashion. Cars were taken to the nearby Santa Fe yard and impact-tested.

—Finally, damage in the sixth category was measured by final inspections after transit in the warehouse.

• **"Not 100%, but. . ."** Erdman doesn't claim to be working miracles: "We don't claim to be 100% accurate in assessing the magnitude of damage at the various stages," he says. "But, as our test-populations grow, we are definitely establishing a pattern that will be useful to us in taking corrective steps."

As one indication of the thoroughness with which Admiral's Midwest Division is approaching the L&D problem, consider the impact-test program:

First, loading-dock personnel were forewarned that certain cars could go out for test. On these cars, Midwest found that loads could indeed be stowed so as to resist damage in impacts of up to 10 mph.

Then, the tests became more realistic. Cars were selected at random, with no forewarning. In one series in January, for example, two loads were switched out for test. One was belted eight times, at speeds ranging from 4 mph to 10 mph. The other got 22 impacts at 4 mph to 8 mph, including a dozen hits at 6 mph.

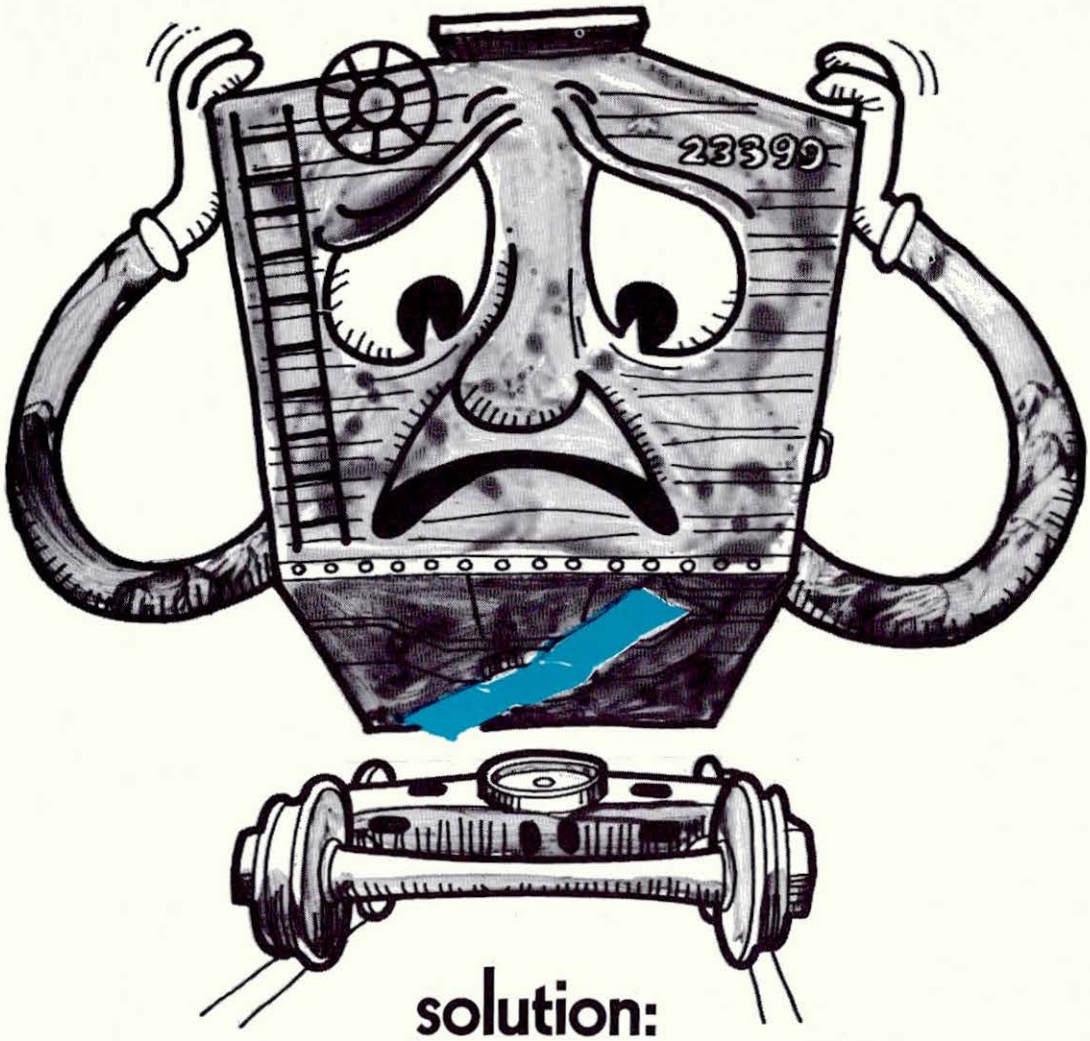
Inspection showed that the loaders had done a pretty good job, as had the car itself, in protecting the lading: The car that sustained 22 impacts showed top-damage to only three units. But, other factors should be considered. For one, use of impact recorders has told Midwest that an average car shipped gets 26 impacts, mostly in the 4-to-6-mph range but with a few over 6 mph. In fact, about two-thirds of these cars will get an impact at 8 mph. And about one-third will be whacked at over 9 mph. Some cars have registered as many as 70 impacts between plant and destination. Under the circumstances, Erdman observes, "I don't think 22 impacts is an exaggeration."

• **Midwest pitches in.** Admiral's Midwest Division, it should be noted, is also doing its part to (1) eliminate in-house damage, and (2) make its products less susceptible to in-transit damage. Corner posts have been strengthened in shipping cartons, for instance, and the budget for dunnage last year went up by 34%. Says Erdman: "We're not going to shrink from our responsibility in solving this problem—and we expect the railroads to meet theirs head-on, too."

Robert Burke, manager of traffic, spells it out: "As our evaluations continue, it's only logical that those railroads that give us the best performance from a quality-of-service standpoint will benefit from retaining business or gaining additional business from us. On the other side, those railroads that aren't performing up to standard and that show an inability to improve are going to suffer a loss in our business."

And how does Santa Fe feel? Richard A. Wells, manager of quality control, puts it this way: "It's reassuring to find a company like Admiral that readily accepts its responsibility in the area of quality control Unfortunately, this isn't always true with all companies—and railroads end up getting blamed for damage that may not actually be their fault. We can't ask more than the even-handed, analytical approach Admiral has taken—and we intend to see that our energies equal theirs."

center plate problem??!!!



solution:

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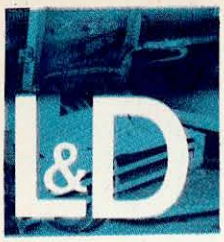


Railroad Police Academy turns out sharper cops

THE LAWS OF ARREST, search and seizure are covered in depth at the National Railroad Basic Police Academy in Jackson, Miss.

As he was portrayed back in the old Mack Sennett comedy era, the railroad cop, or "bull," was always big, always mean, and always easily outsmarted by every hobo and train robber that ever came onto railroad property. Today's railroad police officer probably gets as big a chuckle out of this comical portrayal as anyone. At the same time, though, he may also wish that all he had to worry about these days were a few hoboes and an occasional train robber. Things aren't that simple any more.

Policing railroads is a complex task nowadays, and the stakes are a lot higher than ever before, too. Furthermore, railroads aren't immune to society's ills, and as these ills continue to spill over more and more onto rail properties across the land, things are likely to get worse, thus adding to the complexity of the officer's job.

Seeing the need back in the mid-'60s for some kind of specialized training to help their forces better perform security and law enforcement duties, a group of top special agents decided to establish a training academy. After a nationwide search, the Mississippi Law Enforcement Officers Training Academy, in Jackson, was chosen as the training site. Then, in 1965, the National Railroad Basic Police Academy was born. Its first class was held in November 1966, with 17 students.

● **Training pace quickens.** NRBPA has come a long way since then. This year, as many as 12 sessions, with 24 to 32 students each, may be held. As T.D. Fogarty, director of special services at Illinois Central, readily admits, NRBPA was much too long in the coming. A key figure in the formation of the academy, Fogarty explains the need for such an academy this way: "We could see it coming—the people we had to deal with were becoming much more sophisticated. The methods they were using were highly sophisticated—some of them ingenious. We realized that we had to also make our railroad police work a lot more sophisticated if we ever hoped to stay ahead of the criminal."

The railroad police training course at the Mississippi academy is divided into two 80-hour sections. The first part covers a wide variety of subjects, ranging from the criminal justice system, ethics and professionalism, criminal law, laws of arrest, search and seizure, to courtroom testimony and behavior, community and public relations, plus a host of other subjects which would cause Mack Sennett's railroad bulls more nightmares than a carload of hoboes. Students come from Mexico and Canada, as well as U.S. railroads.

● **Then, back to work.** The two 80-hour sections are not attended one after the other. Instead, officers return after Part One to their jobs on the railroads where they can practice what they've learned. Later, when they attend the second session, their training will cover such diverse subjects as intoxication cases and subsequent court testimony, derailment investigations, dealing with extremist groups, freight claim prevention, developing sources of information, and so on. Both the Federal Bureau of Investigation and the Mississippi Law Enforcement Officers Training Academy have been extremely helpful in establishing and instructing the courses, says Fogarty.

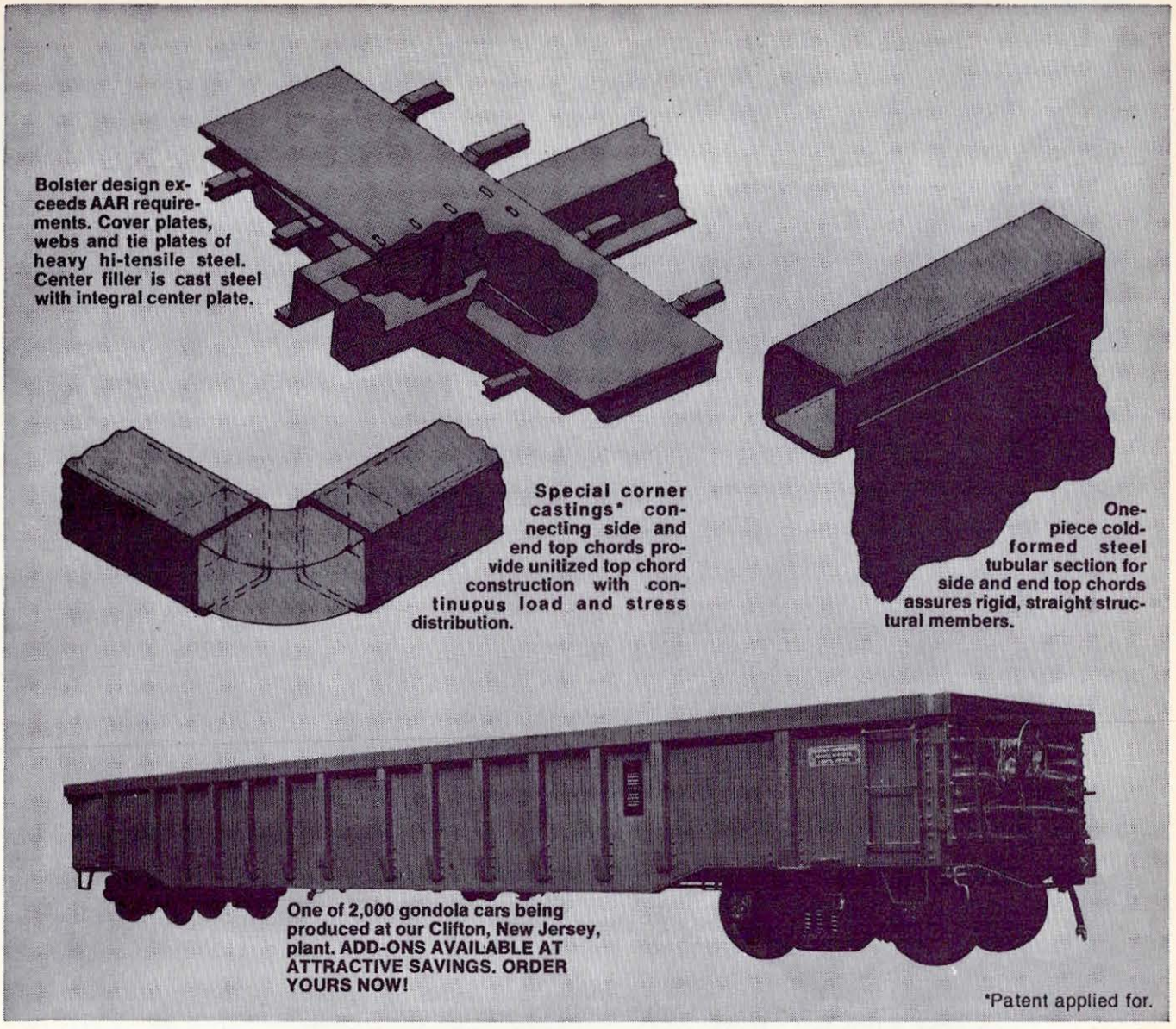
A major portion of the second session is devoted to participation in the investigation of a mock burglary that the FBI developed especially for railroad police officers. Burglary, of course, takes a tremendous toll on railroads, and the incidences and losses are rising at an alarming rate. Officially, the annual theft bill for all railroads runs pretty close to $6 million. Actually, some feel, this bill is really a lot higher since it's probably true that a sizable portion of the annual loss which the AAR categorizes as "unlocated" could really be attributed to theft. Thus, as they study burglary prevention, the students at the Mississippi academy are really learning how to attack a problem that may account for as much as 7% of the total L&D cost.

● **Credit, too.** The NRBPA course is unique in that it is the only one sponsored by the AAR that qualifies for college credit. Hinds Junior College, Raymond, Miss., recognizes the course offered at the academy as being parallel with one it has, so credits are granted. Dr. Floyd Elkins, academic dean at Hinds, feels that officers should be given every opportunity at institutions of higher education to better themselves and be better prepared to deal with a society composed of people with "wide differences in value systems."

The NRBPA course is not the only formal one available to railroad police officers. The International Railroad Police Academy has been part of the training scene for 22 years. It, however, is limited and cannot accommodate as many students as NRBPA. The Police & Security Section of the AAR is thinking of gearing this course toward management training, says Fogarty.

● **Mini-school in Chicago.** Since a waiting line is developing for the academy in Mississippi, railroads in the Chicago area are now offering new officers a mini-Part One, patterned after the NRBPA's initial session. Sponsored by the Chicago Railway Special Agents Association, this course offers a total of 24 hours training for those who are waiting to enroll in NRBPA.

Fogarty reports that he can see a tremendous improvement in the work the men in his police force are doing after they attend the academy. And, as he recalls some of the horror stories that his men have been involved in while performing their jobs, you can see that they need all the skills the course helps hone. When you see the leveled fence over which a fleet of new automobiles has been driven away, when you get reliable information that a gang is actually planning to rob a commuter train on a special run to a racetrack (not the return run, naturally), when you see a box car that has been jacked up and all the journal brass stolen, when you're investigating the theft of entire trailers—then you know that you've got to have specialized training so that officers can cope with these criminal acts.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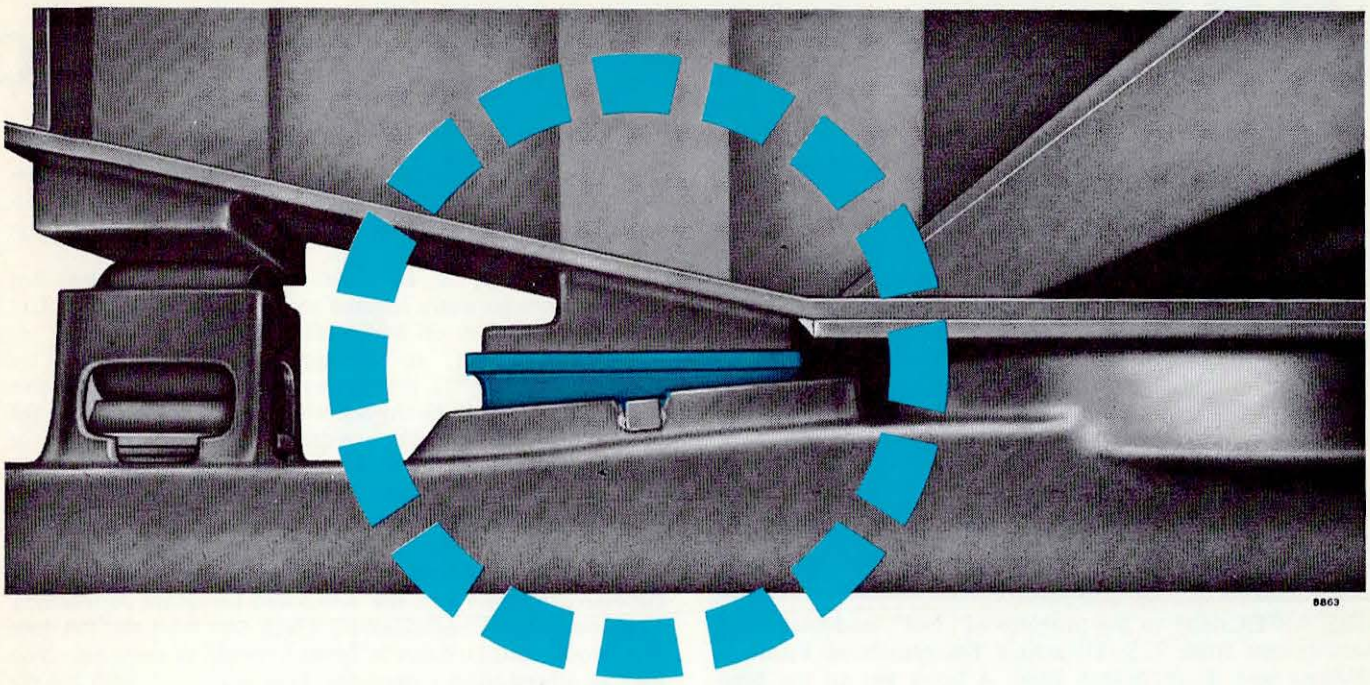
C-PEP CONTROLS HUNTING



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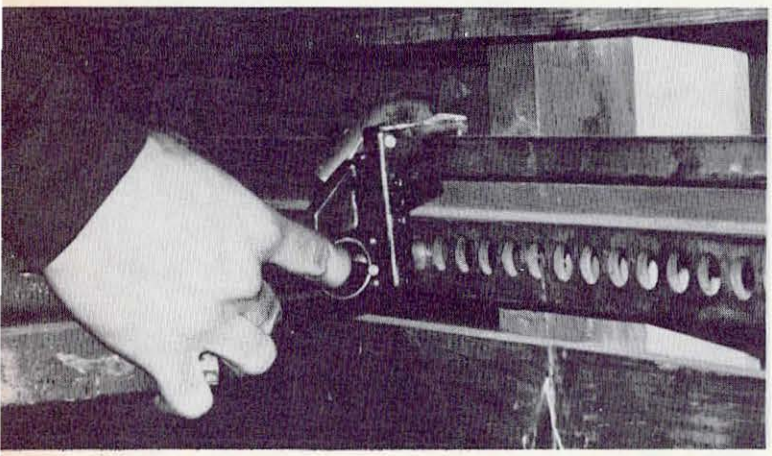
Loss and Damage prevention

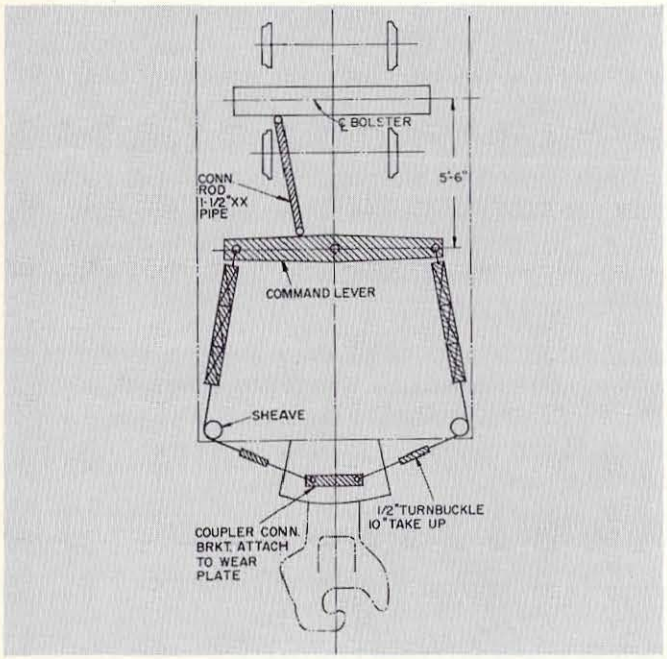


ONE APPROACH to the problem of "lost" load-restraining bars comes from U.S. Gypsum's Transportation Products Division and its multi-lock head. A hook pin on the head engages horizontally-positioned belt-rail systems and door bars; a horizontal lock pin engages vertically-positioned systems. Restraining bars ranging in length from 108 to 115½ inches can be accommodated; thus, about 90% of existing belt-rail-equipped cars could be fitted.

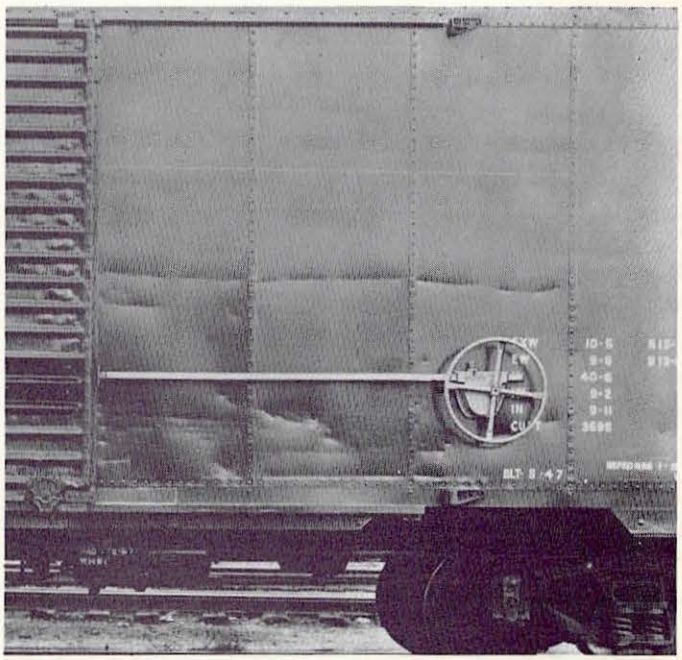
If there's any segment of the railway supply business that really typifies the "build a better mousetrap" spirit, it almost has to be that segment that works on freight loss and damage prevention.

Unfortunately, it also sometimes seems to be that "seldom have so many labored so much for so little." L&D-prevention gear is oft-maligned: "It costs too much," or "It doesn't pay off," or "We have to keep repairing it," or, simply, "More (***) jewelry to worry about." Sometime, though, there has to be the sobering thought: What might the L&D bill look like if there were no cushioning devices, or interior load-restraining devices, or any of the other dozens of devices designed to get the customer's freight to destination without damage?

Then, you look at the money suppliers have invested in equipment development. You look at the work done by the Pullman-Standards and the AFCs and the other carbuilders. You look at a FreightMaster, which put $3.3 million into new production facilities in Texas a couple of years ago. You look at several-score companies, large and small, with a stake in the market. And until the millenium arrives—that day on which every car gets perfect loading, perfect handling, perfect unloading—the industry may need all the R&D in damage-prevention it can buy, beg and borrow. Here is a sampling of the type of anti-L&D equipment that is available.



COUPLER POSITIONING is a problem that model railroads have solved by simply connecting the coupler to the truck. Real railroads can't take such an easy route on long cars. But Holland Company's Freight Equipment Division talks in "breakthrough" terms, about its coupler positioner, which is said to provide a quick and automatic response to keep coupler aligned with track center, and to require minimum maintenance.

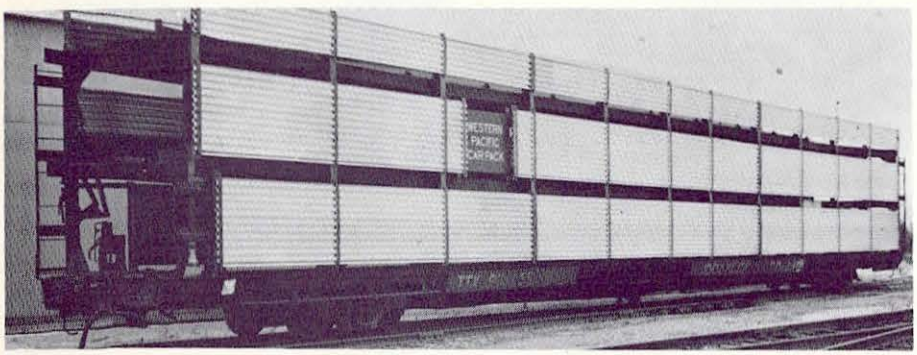


BOX-CAR DOOR DAMAGE is a familiar problem—and one which Hennessy Products is working on with its Slidewell Door Control, a permanently-attached device designed to permit easy opening of stuck or wedged doors. The control mechanism provides a mechanical advantage of 35-to-1. With this advantage, employees facing the problem of dealing with a recalcitrant door have no need to resort to the use of fork-lifts, or other tools which may cause damage.

tools: A Sampler

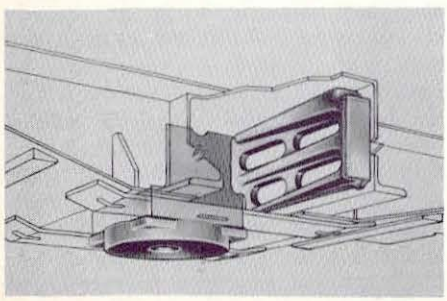
A FAMILIAR SIGHT on the nation's railroads by now is Vert-A-Pak—the Whitehead & Kales-built structure which provides both maximum capacity (30 Chevrolet Vegas) and in-transit protection from vandalism. Vert-A-Pak's 10 15-by-17-foot doors do double duty—as entry ramps when they're open and as vertical storage racks when they're closed. En route from assembly plant to destination, autos are protected in a completely enclosed car.

LOAD-BRACING in gondolas is what it's all about with Stanray's automatic locking bulkhead—a roller-mounted load-restrainer which can be adjusted in the car at positions spaced two inches apart and then locked in place. Locking mechanisms are gravity-activated. Tests have indicated an ultimate strength of 115,000 pounds and a yield strength of 83,000 pounds. Movement and locking of the bulkhead is described as a one-man job.

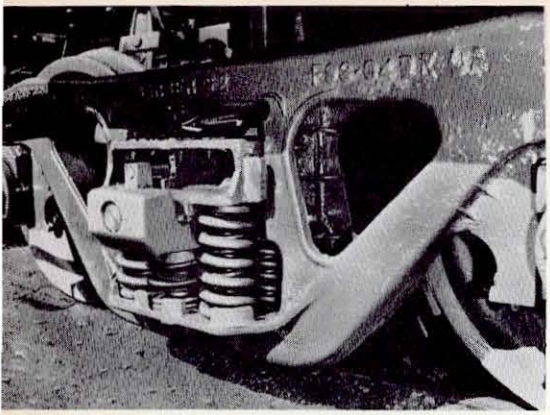


WITH IN-TRANSIT DAMAGE to automobiles increasing, manufacturers have been asking for greater protection against vandalism—and one answer has been these Reynolds Aluminum panels. The roll-formed sections are 22 feet long, four feet high. They're said to offer advantages in both installation cost and in maintenance. Despite the amount of metal visible, installation of the panels adds only about 1,200 pounds to tare weight on an 89-foot car.

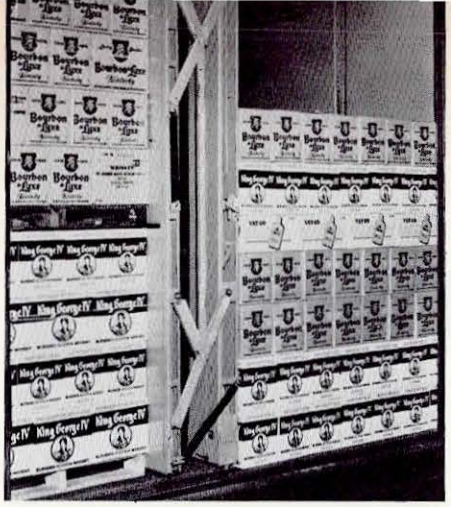
THE ACRONYM IS CAMUS. And Camus I is Aeroquip's load-restraining system for piggyback trailers. That's "Captive Adjustable Must-Use System." The self-adjusting device is a bulkhead barrier designed as an integral part of the trailer—and designed in such a way that trailer rear doors may not be closed unless the bulkhead is in its load-restraining position. Provision is also made for bulkhead movement to take up slack in the load.



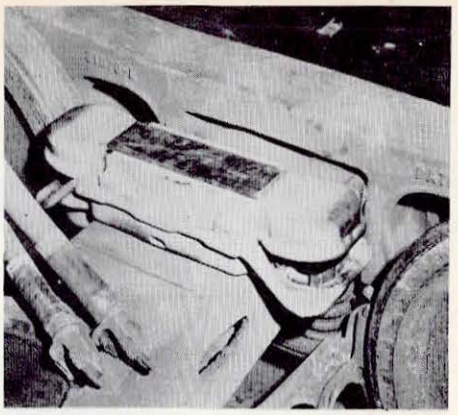
MENTION THE WORDS "rock and roll," and people start worrying. It's this problem—the rock, the roll—that the Waugh low-profile center filler, from Dresser's Transportation Equipment Division, is designed to attack. It's applicable to new and old rigid-underframe cars, and is said to combine the structural advantages of an integral cast center bowl with the economic advantages associated with fabricated types.



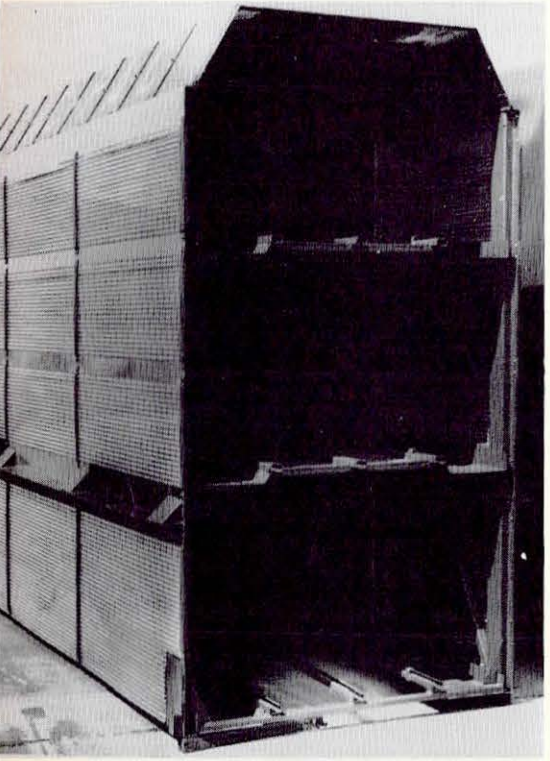
IMPROVED VERTICAL RIDE QUALITY is the aim of A. Stucki's HS-6 hydraulic stabilizer—a unit which is installed in the spring nest of a car to prevent springs from bottoming and thus to ensure that lading is always over a spring system. The device is said to materially improve ride quality in the 45-to-65-mph speed range, where vertical bounce (perhaps caused by track deficiencies) can cause considerable damage to lading.



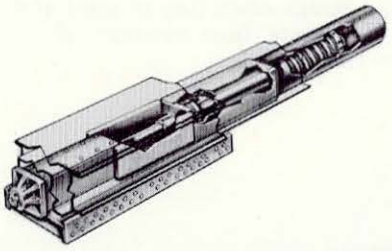
AIR BAGS may be big news for automobiles sometime—but shippers are already taking advantage of the air-cushion bulkhead principle in such applications as Equipco's ACB system. The primary-bulkhead/secondary-bulkhead/air-bag system can be installed in three configurations—one providing two complete sets of units, one with a primary bulkhead flanked by air bags and secondary bulkheads, and one designed for end-of-car positioning.



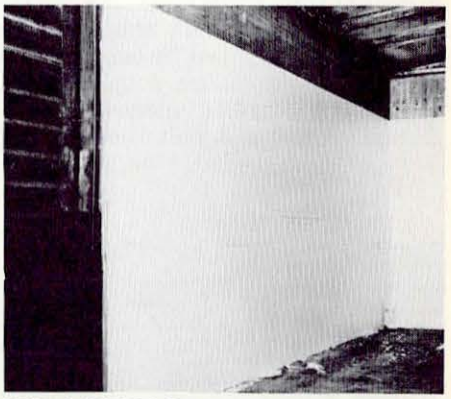
AS ONE MEANS of controlling rock and roll, AMSTED's American Steel Foundries developed the Simplex side bearing, which is mounted on the bolsters and consists of a base casting, bridge casting and two sets of friction elements. Control is through dissipation of the kinetic energy of the body rocking on the bolster and through cushioning of body motion to prevent heavy impact blows which may lead to wheel lift and structural damage.



ONE OF THE NEWEST CONCEPTS for shipping new automobiles is Stac Pac—an Evans product which represents another contribution to the state-of-the-art in damage-free transportation of assembly-plant output. The three-tier Stac Pac units provide a certain flexibility in loading/unloading operations—and they offer the undeniable advantage of completely enclosing the load in transit. Among automakers, General Motors Corp.'s Cadillac Division has been most involved.



ONE ENTRY in the car-cushioning field is Keystone Railway Equipment's Shock Control Model S.A. single-acting unit. This model, with fixed sill stop, is self-contained—which eases installation and minimizes requirements for car-builders to fabricate ancillary items needed for installation. This particular unit is available with 20-inch travel in 35-ton, 70-ton and 100-ton capacities, and is designed to meet "maximum" cushioning needs.



IT'S A WET LOAD, wood pulp moving via BN from Cloquet, Minn., to Brainerd. But it gets there free from contamination—in cars lined with full-length panels of Glasbord, fiber glass reinforced plastic panels produced by Kemlite Corp. The cars are constantly wet. But, the lining doesn't rot, rust or mildew. And, it's reported, both paper mill and railroad benefit, because use of the interliner is cutting both material loss and equipment down-time.

THESE ARE "LAW-AND-ORDER" times—and that's where Tyden Seal Company comes in, so far as railroads are concerned, with its device which, it's said, can't be opened and relocked or replaced without showing signs that it has been tampered with. Heart of the system are two piano rings. Initially, they are held open to receive the band. But after locking, these rings overlap—and thus, any attempt to disengage the seal will destroy it, thus revealing the disengagement attempt at a glance.

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You have to be pretty sure of yourself before you make yourself a target for criticism.

But we did.

Compiled a questionnaire about our service and then asked 1400 customers from all over the country to grade us.

Over half did. They answered our questions about their problems. And really let their hair down.

They told us how we compared with other carriers. And look! We did quite well!

	Excellent	Good	Fair	Poor
Maintaining schedules	18.5%	58.5%	17.3%	5.7%
Claim disposition	13.1	48.2	19.5	19.2
Rate quotations	22.1	47.8	19.2	10.9
Car and trailer supply	15.4	50.6	20.3	13.7
Billing	16.2	46.9	19.5	17.5
Personal follow-through	50.5	34.9	9.7	4.6

Then we asked them specifically how we could improve, and we got some very good ideas to work on.

And, unsolicited, of course, we even got some praise.

Now our work seems cut out for us. We don't want to railroad you. We just want to build a model railroad.

we've been working on the railroad

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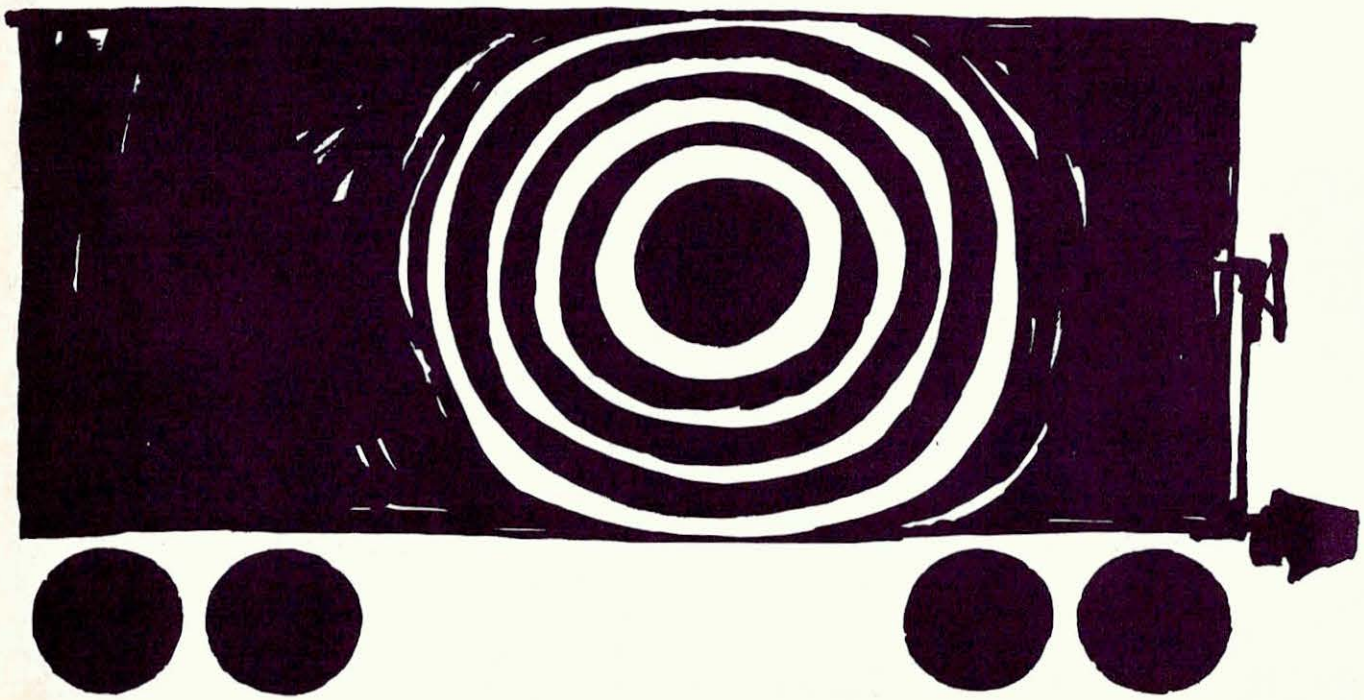

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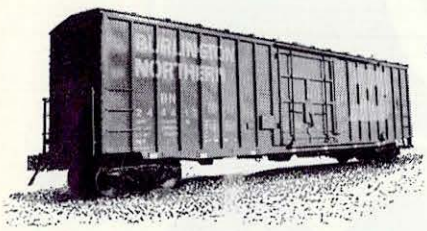

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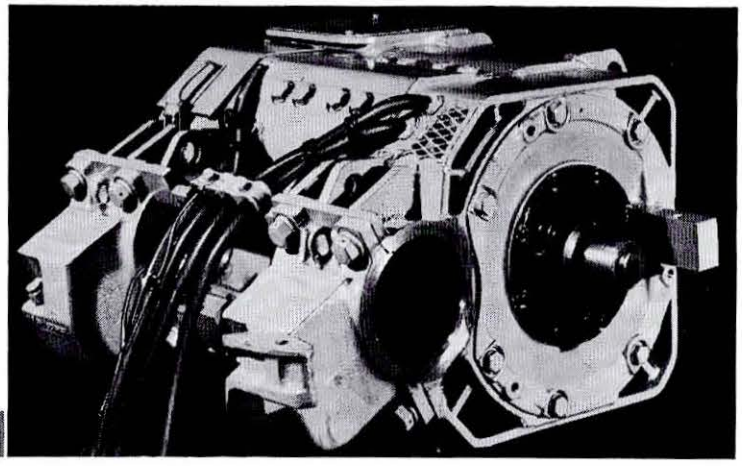

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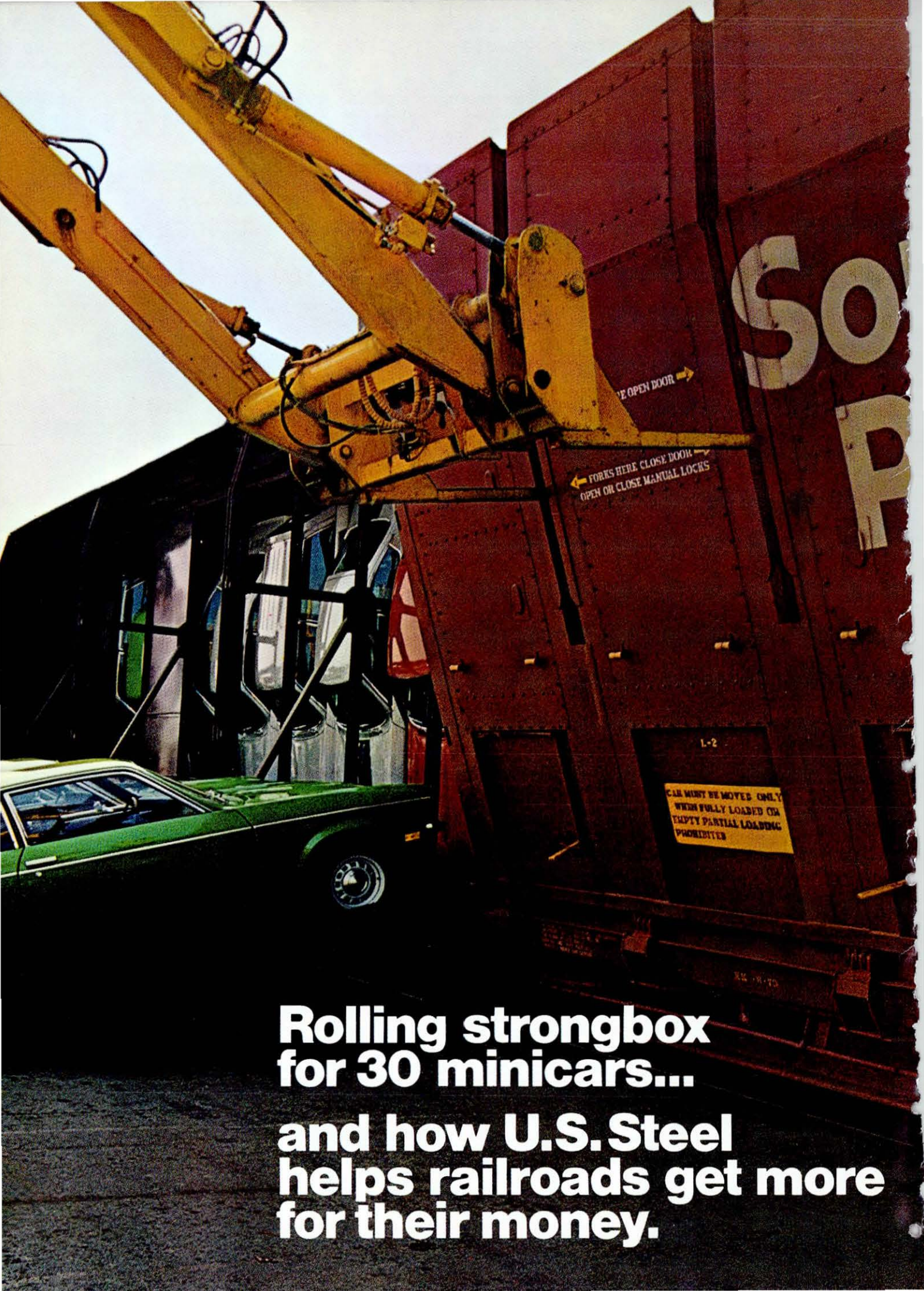


Rolling strongbox for 30 minicars...

and how U.S. Steel helps railroads get more for their money.

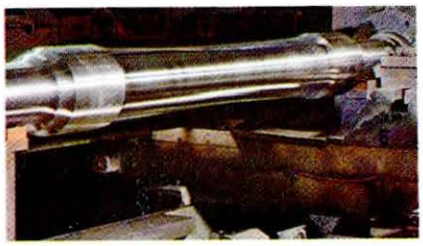
This giant freight car, Vert-a-Pac, hauls 30 little autos in scarcely more space than the usual tri-level rack car needs for 12 of standard size.

Southern Pacific and a major auto maker developed the 18-foot-high car to carry the 14-foot-long autos in a revolutionary position: nose-down on walls that also serve as loading ramps.

To cut the weight of this rolling strongbox (Vert-a-Pac is virtually vandal-proof and dirt-proof) the designers chose USS COR-TEN A Steel. This high-strength, low-alloy steel is 40 per cent stronger than carbon steel, has 5 to 8 times the resistance to atmospheric corrosion and gives twice the paint life.

It's used in the built-up center sill of the basic flat car (prime contractor: ACF Industries) and in the above-deck auto housing (subcontractor: St. Louis Car Division, General Steel Industries, Inc.). We're supplying steel—and good advice—on a lot of other projects important to the railroads: cars, rails, bridges, buildings.

If you'd like to talk, phone your USS man or write United States Steel, Box 86, Dept. 7394, Pittsburgh, Pennsylvania 15230.



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'61 stainless liner still tiptop. No corrosion loss; almost no adjacent galvanic corrosion: that's the verdict on these quick-emptying, hopper-floor sheets of USS Type 302 stainless steel.

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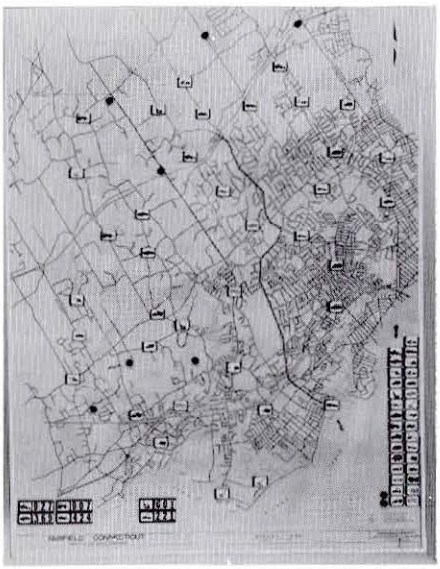
CONSOLIDATED FREIGHTWAYS

New Products Report



Visual control boards virtually eliminate need to type or write

A new line of magnetic visual control boards is being offered for all transportation, traffic and trucking operations. They are available for, among other things, vehicle maintenance, preventive maintenance, trailer location, trailer or vehicle inventory, scheduling of drivers and rental cars or trucks. Other systems require much writing and maintenance; the use of magnetic visual boards virtually eliminates typing or writing by using over 32 different colors and over 200 different styles of magnetic accessories. More than 2,000 different systems are available. *Edward Ochman Systems.* (RA-1)

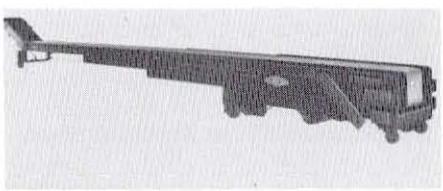
Reflector gives wider coverage

A floodlight with a reflector to meet the needs for accurate beam control can produce crisp visibility in loading areas and switching yards. The GAF Model combines the benefits of parabolic and elliptical reflectors. The parabolic portion narrows vertical beam coverage to reduce glare and light waste. The elliptical portion increases horizontal beam spread to cover a wider area with fewer floodlights. The Aim-Finder quadrant assures accurate aiming. The floodlight may be used with mercury vapor, metal halide or high-pressure sodium lamps. *Crouse-Hinds.* (RA-2)

Dock leveler offers perfect transition from dock to truck

The new 1300 series fully-mechanical hinged-lip dock leveler features a counterbalanced, upward-biased platform. The dock attendant pulls a lanyard to activate the unit, which rises to its high point. The lip extends and the attendant walks the unit down to the truckbed to form a perfect transition from dock to truck for material-handling equipment.

The standard 1300 series model services all trucks from 12 in. above dock to 12 in. below dock level. Additional up or down travel is available for special applications. The unit has a 20,000-lb roll-over capacity; special capacities can be rated up to 40,000 lb. Units are fully assembled and tested, ready for installation in pre-formed pits. *Rite-Hite Corp.* (RA-3)



Adjustoveyor-stacker eliminates secondary-handling problems

A new Adjustoveyor-stacker features exact and instant control of stacking

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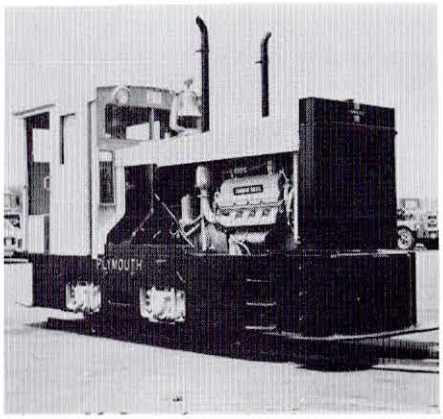
angle and height. The new design enables goods to be delivered or received at the exact height required for optimum stacking, which saves the lifting and labor involved in secondary handling. The new, self-propelled Adjustoveyor-stacker goes in or out of cars and trailers under its own power and can easily be moved from location to location. It measures 10 feet closed, and extends to a maximum of 30 feet, plus the 4-ft stacker, or to any length between. *Stewart-Glapat Corp.* (RA-4)

New chassis series handles nearly all ISO containers

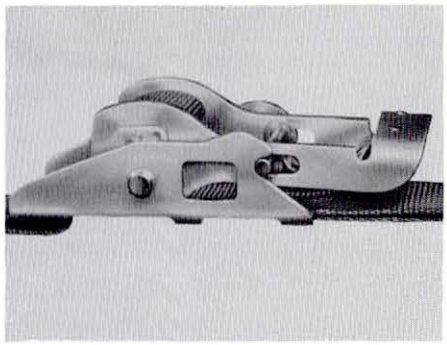
A new series of container chassis has been designed to accommodate practically any ISO container. The new series can accommodate all types of ISO containers which include tunnel and non-tunnel type containers, as well as 20- and 40-ft units. The chassis are manufactured with heavy-duty components to withstand the rigors of piggyback service, especially during rail-car humping operations.

Twist lock and pin lock operating mechanisms and handles are stored within the bolster structural members, protecting them from damage. Glad hands and chassis lights are also recessed for maximum damage protection. *Fruehauf Division.* (RA-5)



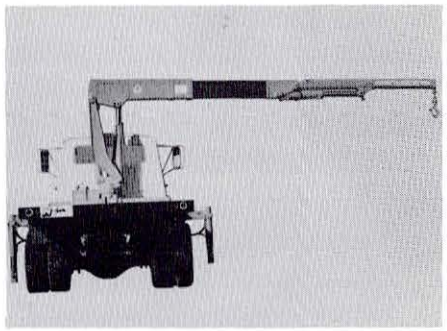
Gasoline industrial locomotive re-powered with diesel engine

Repowering of an 8-ton industrial locomotive with a 185-hp diesel engine and torque converter could soon lead to similar conversions of seven other units in the same fleet. The 36-year-old gasoline locomotive got a Model V8-185E eight-cylinder Vee-type diesel designed for fuel economy and good performance with low-priced fuels. The PT fuel system uses a proved metering and injection concept having few, uncomplicated components. This simplicity is said to assure low maintenance costs and ease of servicing. The new prime mover is said to withstand long idling periods much better than its gasoline-fueled predecessor. *Cummins Engine.* (RA-6)



Tie-down with toggle buckle can handle loads to 8,500 lb

A new tie-down with toggle buckle is available for use in securing general duty cargo in trucking, in-plant transfer, hauling, moving and delivery. The 1 3/4-in. toggle buckle, designed to meet load requirements to 5,000 and 8,500 pounds, is extremely light in weight. Even in the locked position, slack can be taken up by pulling the top strap. It is also easy to adjust and pre-load. The assembly includes abrasion-resistant, high-strength, 1 3/4-in.-wide nylon webbing (10, 16, 20, 24 feet) with end fittings, hooks, rings, loops or truck clips. Also available are continuous loop assemblies, other lengths, types of webbing and end fittings. All metal parts are anti-corrosion treated. *Eastern Rotorcraft Corp.* (RA-7)



Truck-mounted crane has more payload space

A new combination articulating-telescoping boom crane is rated at a maximum of 13,270 pounds. The new truck-mounted crane, called the Big Rascal, has a standard reach of 19 feet, 9 in. Its standard rotation is 390 deg. An additional reach of 29 1/2 feet is attainable with optional manually telescoping jibs. Big Rascal is said to be ideal for jobs where truck-crane units are used for lifting and erecting at job sites. The unit folds and tucks neatly behind the cab and offers more payload space than most truck cranes of its size. *National Crane Corp.* (RA-8)

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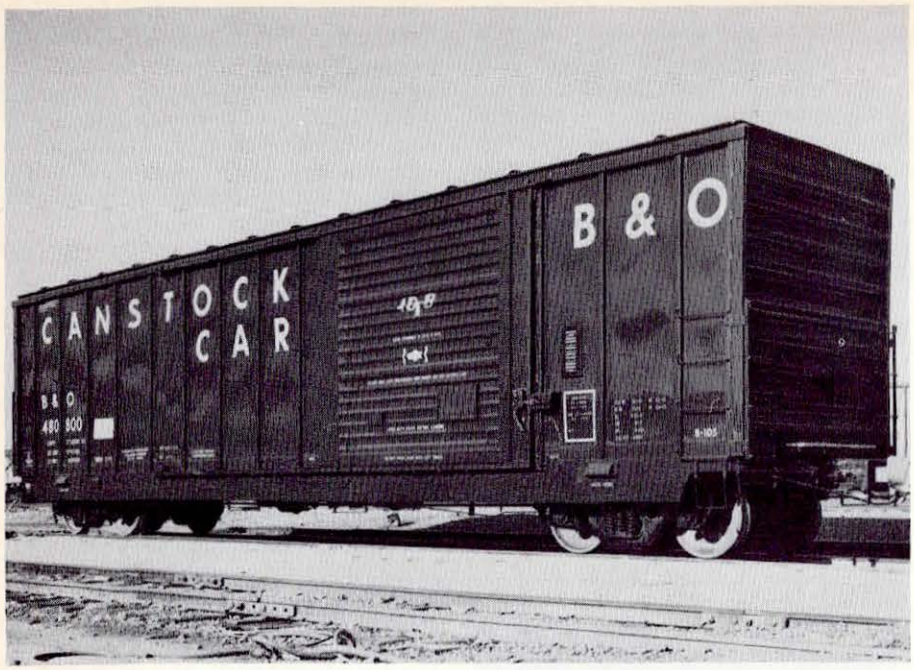


New car cuts costs for shippers and railroads

A strong bid is being made by Chesapeake & Ohio/Baltimore & Ohio to lure a larger share of the potentially lucrative tinplate and aluminum sheet traffic to the rails. Spearheading this drive is a new 50-foot box car—the Canstock Car—which has special features aimed at overcoming some of the problems that have been driving shippers from railroads to trucks.

A fleet of 75 of these extra-sturdy cars, fresh off the assembly line at Pullman-Standard's Bessemer, Ala., plant is now entering service. The car design itself was developed by C&O/B&O following almost four years of research into the needs of not only tinplate and aluminum producers but also the receivers—can manufacturers—as well. The road's market researchers had good reasons for studying the tinplate traffic very carefully—U.S. mills shipped over 6.8 million net tons in 1971 and that's not the kind of traffic volume railroads want to see slip by. Nor do they like to see quantities of aluminum canstock, whose use is rising steadily, move any way but by rail.

• **Continuing to grow.** Tinplate usage grows about 2% to 3% annually. The aluminum container market is growing substantially faster than that. While both are metal products that might seem fairly immune to damage, both steel and aluminum are being produced in thinner gauges, so they are among the more delicate commodities.

Commenting on the task that faced members of the C&O/B&O commercial team when they decided to investigate the canstock market, Norman S. Brubeck, assistant marketing manager-metals industry, said: "It was no secret, of course, that the railroad industry had been losing out to the trucker in the transportation of tinplate and aluminum. Shippers had been complaining about too much damage to their products when shipping by rail, and they also felt that their load preparation costs had been running too high." The fact that rail rates were lower did not compensate for the problems which shipment in conventional box cars presented.

The Canstock Car has a number of distinguishing features—some obvious, some more subtle, but all aimed at reducing damage or at making it easier and cheaper for the shipper to use the railroads.

• **The "End Door."** According to G.J. Weihofen, C&O/B&O manager of equipment planning and development, in the road's Product Development Department, the most innovative feature of the car is its so-called End Door arrangement. Unlike virtually all the other thousands of box cars on the rails today, with door openings at the center, the Canstock Car's doors are off-center, and they are off a considerable distance. Actually, the door is only 8 ft 8 in. from the end lining at the A end. "We put the doors," says Weihofen, "where the last two coils have to go for maximum payload and easiest loading."

There are several other features:

—Four heavy-duty movable bulkheads that eliminate need for longitudinal blocking;

—A translucent fiberglass roof panel toward the long end to help illuminate the loading area furthest from the doorway;

—A 12½-ft door opening for easy fork-lift maneuverability;

—A center stripe painted the full length of the floor and on ends and bulkheads to aid fork-lift operators set coils properly to achieve a balanced load.

The car also has Huck-bolted edge-grain wood decking. This is the first time P-S has ever used this method of fastening a floor. Also, to help battle condensation, the side posts are used to vent the car as uniformly as possible. The bottoms of the posts are left open and a hole is punched through the side sheet at the post's top. This provides 28 points for admitting vent air and makes it rise through a 10-ft tube to exclude as much moisture as possible.

That center stripe is a product of the C&O/B&O study of loading practices at customers' plants. It was discovered that fork-lift operators usually chalked a line in the car to serve as a guide. This seemed an unnecessary waste of 10 minutes, reasoned the study team. So, a permanent stripe was ordered painted in each of the new cars.

• **Overcoming damage.** Two distinct types of damage occur to coils and palletized sheets of tinplate or aluminum. The first is chemical, Brubeck explains. It shows up as stains caused by condensation and is a frequent cause of rejection. Suprisingly, aluminum is just as subject to this type of damage as is tinplate. Producers have been upgrading their packaging quality—call it "environmental control"—to prevent moisture-laden air from reaching the canstock. But it does no good if this barrier is destroyed during transportation.

The second is physical and this is primarily our responsibility says Brubeck. And this is where the solution of the problem answers two challenges. By preserving the integrity of the package, that is by preventing any physical damage, both types of damage are eliminated. Car cushioning is a big help. But it takes more than that.

Load-restraining bulkheads play an important role. However, experience during an extensive test period with a prototype car taught C&O/B&O that the ordinary bulkhead sometimes is not sturdy enough to hold back heavy coils weighing as much as 25,000 lb each.

Coils range from 50 to over 60 inches in diameter and vary in weight from 8,000 to over 25,000 lb. It is estimated that in 6 to 8 years coils shipped will be

too large (over 56 inches in diameter) to load side-by-side across a box car.

• **Super-strong bulkhead.** That's why Evans Products was asked to design and manufacture a super-strong bulkhead for the Canstock Car. As an example of the sturdiness built into these load-restraining units, the set of four weighs 9,600 lb. Each can restrain 60,000 lb of coils in line, or 100,000 lb of coils placed side-by-side.

Development and testing of the securement system was a highly comprehensive program taking nearly three years. After determining that bulkheading or the restrained load concept was the way to best secure canstock, C&O/B&O found that existing bulkheads were not adequate to restrain the heavy concentrated loads. Over a year of field testing was required to develop an adequate bulkhead to take canstock loads. This covered 42 test moves of coil and cut sheet, steel and aluminum, single-line and side-by-side loading, single- and double-tiering. A measure of the success of bulkhead restraint is that there was not a single instance of damage in any of the 42 test loads.

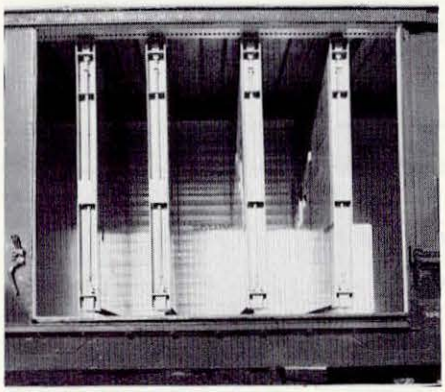
Using a colorful booklet that details suggested loading methods, along with a scale model of the car, the roads' market and product specialists contacted about 60% of the key shippers of canstock. The reaction to the car was as enthusiastic as had been expected, Brubeck says. As soon as the first cars were delivered, they were displayed in Baltimore, Pittsburgh, Cleveland, Cincinnati, Chicago and New York so that again potential users would know just what C&O/B&O had done.

There are a number of ways that shippers might load coils and packaged canstock in box cars, reports Ralph L. Felter, fleet planning officer, who conducted the field test program and prepared a comprehensive loading guide for dock crews. For one thing, they can be loaded abreast and then locked behind a bulkhead. Because it has a wide loading area (9 feet, 7 inches), the Canstock Car can easily accommodate a pair of coils up to 56 inches in diameter side-by-side. While this is a current popular size with shippers, an extra added inch of diameter of coils when dealing with units this size can mean another thousand pounds. This sparks the drive for larger coils. In these cases, C&O/B&O personnel are working with their customers on loading the bigger coils in line and still achieve a full payload without damage or without exceeding the restraining limits of the bulkheads.

Felter also points out that doorway loading will be employed regularly with this new car for the first time. Up to now, there was little incentive to load the doorway. Existing cars either ran out of capacity before using the doorway area, or too much of the load would be on one truck. To facilitate loading, the door is an extra-wide 12½ feet, the largest of its type ever produced by Youngstown Steel Door.

The off-center door arrangement and the extra-wide openings are designed into the car to make it more attractive to shippers and also to save the railroads money in car-construction costs. The easy solution to the loading space problem would have been the 60-ft box car. While C&O/B&O feels that for most merchandise traffic the 60-ft box car is preferable to the 50-ft type, for a heavy-density commodity like canstock there should be enough space in a 50-ft car to accommodate a full payload.

• **Greater payload.** The 50-ft car that resulted from this development program can accommodate more payload than a 60-ft car whether the limitation is set by the car's load limit or by its floor space.



FOUR BULKHEADS of heavy-duty design can contain a maximum load.

As explained by Weihofen: "The key was our 'End Door' configuration. This eliminated the need for 20 feet of car length that is normally used only to permit turning a lift truck in a conventional car, and ends up empty during movement. Placing the door near one end of the car permits the lift truck to go straight in and straight out with the final pallets—there is no need to turn the truck. The result is that the 50-ft Canstock Car offers 10 feet more usable length than a 60-ft center-door car."

Although C&O/B&O was able to save considerable money by designing a 50-ft car to do more work than a normal 60-ft car would do, the Canstock car, because of all its load-protection devices and sturdy construction, is still quite expensive. "While the Canstock Car is expensive only on a per-car basis," explains Weihofen, "if full advantage is taken by the shipper of the payload it can carry, its cost per coil carry is less than comparably equipped 60-ft cars or conventional 50-ft cars." It is furthermore competitive against replacement DF equipment on a total capacity basis.

• **Attractive to shipper.** "The Canstock Car has been made attractive to the shipper by reducing his loading costs and by minimizing the risk of damage to his products," add Weihofen. "We will be looking to the shippers to make the car attractive to the railroads by loading promptly and and as near to capacity as possible. Performance of this fleet of 75 cars will determine whether the railroads can justify providing shippers with additional cars of this type."

The financial justification for this car has not been easy. "But," says Weihofen, "this is not a problem unique to this car. The problem is becoming common for all new-equipment acquisitions. More and more we are finding that traffic which is attractive in existing equipment is marginal or inadequate to justify replacing that equipment. The key to unlocking this dilemma is better utilization. This does not mean just more trips or more miles per month, but better utilization in the fullest sense—more tons per month achieved by increasing payload, as well as turnaround."

C&O/B&O believes that the Canstock Car represents the technology needed to physically handle tinplate and aluminum coils or cut sheets at minimum cost and without damage. No attempt has been made to patent the car, as was done with a new cable-hauling car developed last year (RA, Nov. 29, 1971, p. 36). Along with capturing or recapturing tinplate and aluminum traffic on its own system, C&O/B&O is encouraging other roads to adopt the design as their standard.

Weihofen points out three advantages for the rail industry in doing this. "Most obvious is the potential cost savings on future production runs by combining orders. Most important, perhaps, is an easier ability for one railroad to justify this advanced equipment if other roads participating in its hauls are contributing their share of cars. Finally, making cars of this loading capacity widely available should encourage shippers to program big loads as something regular, rather than as something special."

• **The crossroads.** P.J. Hart, C&O/B&O's director of product development, adds: "We who have been close to this development feel this car is the most competitive piece of equipment railroads can offer for canstock. With shipper cooperation loading to capacity, it can be the optimum car for railroads as well. With this car, we are perhaps at a crossroads as to whether the 'system' [railroad and shipper practices] can make new car types productive enough to justify their costs.

"We have two choices. We can abandon efforts to provide better equipment. Or, both railroads and shippers can work to improve their roles in the system so that shippers can benefit from material handling savings and reduced damage, while railroads can benefit from more earnings." ■

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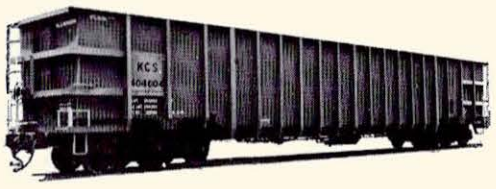

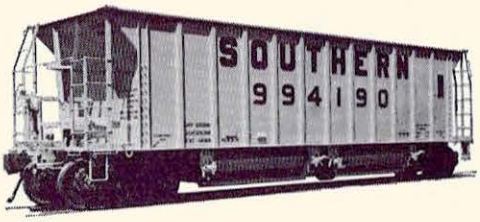

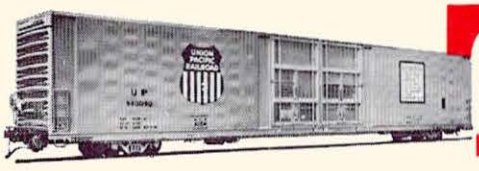

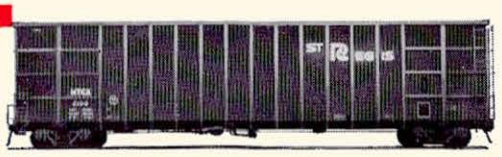

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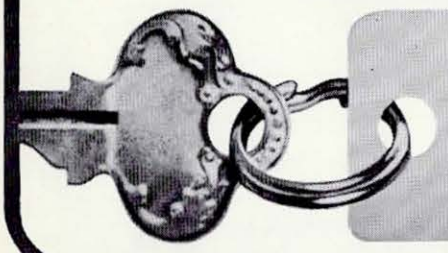

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Circle 35 on coupon page 67

People

AMTRAK.—**Frank S. King,** system general manager of passenger operations, **Penn Central,** Philadelphia, named vice president-operations for Amtrak.

James M. Cowell, Jr., director of procurement, planning and material control, Electric Boat Division, **General Dynamics Corp.,** Groton, Conn., has joined Amtrak as director-purchasing and material control.

BELT RAILWAY OF CHICAGO.—**Samuel J. Levy** named resident engineer, Chicago.

CANADIAN NATIONAL.—Has incorporated its International Consulting Division as a separate subsidiary, under the name of **CANAC Consultants Limited,** Montreal. **Maurice Archer,** senior vice president of CN, elected chairman of the board of directors of CANAC. **Alton V. Johnston,** general manager, CN's International Consulting Division, appointed president of the new firm. CANAC's vice presidents are: **A.E. Ades** of Air Canada, **J.L. Cann** and **V.R. Cox** of CN. Mr. Cann was general manager-corporate projects at CN system headquarters, Montreal, and Mr. Cox was manager, Saskatchewan Area.

CANADIAN PACIFIC.—**W.A. Smith,** assistant chief engineer, Montreal, promoted to chief engineer, succeeding **C.A. Colpitts,** retired after 46 years with the CP. Mr. Colpitts will continue in a consulting capacity. **Cornelius Neufeld,** assistant chief engineer, appointed deputy chief engineer. **John Fox,** engineer of track, appointed assistant chief engineer with special responsibility for rail projects. **C.R. Pike,** superintendent, Toronto Terminals Division, named assistant chief engineer with responsibility for non-rail projects.

FRISCO.—**T.E. Kiser,** traffic manager-processed foods, St. Louis, named district sales manager, Houston, Tex.

LOUISVILLE & NASHVILLE.—**K.L. Meredith,** assistant district sales manager, Cleveland, appointed district sales manager, Miami, Fla., succeeding **G.S. Finnegan,** retired. **Jerry L. Crowe,** assistant district sales manager, Atlanta, named district sales manager, Owensboro, Ky., to succeed **C.M. Beeler,** retired. **R.L. Walters,** district freight agent, Milwaukee, named district sales manager there, succeeding **I.T. Westerman,** retired.

LOUISVILLE & NASHVILLE—SEABOARD COAST LINE.—**William I. Johnson,** director of purchasing, L&N, elected to the same position on the SCL. He will maintain headquarters in Louisville and Jacksonville.

MILWAUKEE.—**Philip R. Smithmeyer** named manager-real estate, Real Estate, Economic and Resource Development Department, with headquarters in Chicago. **Martin L. Bardill** appointed senior industrial engineer with assignments in Iowa, western Wisconsin and eastern Minnesota, including the Twin Cities. **William H. Waldman** becomes industrial engineer with assignments in southern Iowa, Kansas, Missouri and Nebraska. **James V. Kelly** named industrial representative and geologist.

RAILROAD RETIREMENT BOARD.—

move tools and materials to and from maintenance areas the easy way...

with NOLAN Tool and Supply Cart

This handy work-saving vehicle gets equipment where it's needed in a hurry — reduces man-hours needed to perform maintenance chores. The unit divides into 2 sections which can easily be carried by one man. Capacity 2,000 lbs. Platform size 48" x 45". Other sizes and designs available. Write for Nolan Catalog 12.

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Circle 36 on coupon page 67

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How many Repair Cards are rejected each month? To reduce that number, sign up for our new home study course for Write-Up Men.

This course consists of fifteen lessons as follows:

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7. Running Boards—Dome Platforms—Brake Steps—Cross Over Platforms—Repair to Sills.
8. General Repairs and Instructions.
9. Material and Interchange of Freight Cars.
10. Responsibility.
11. General Regulations for Pricing and Billing General Rules.
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13. The A.A.R. Billing Repair Card Basics.
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The cost is $3.00 per lesson ($45.00 total) and includes a 1971 Field Manual, grading of all examinations and monthly progress report to your Railroad.

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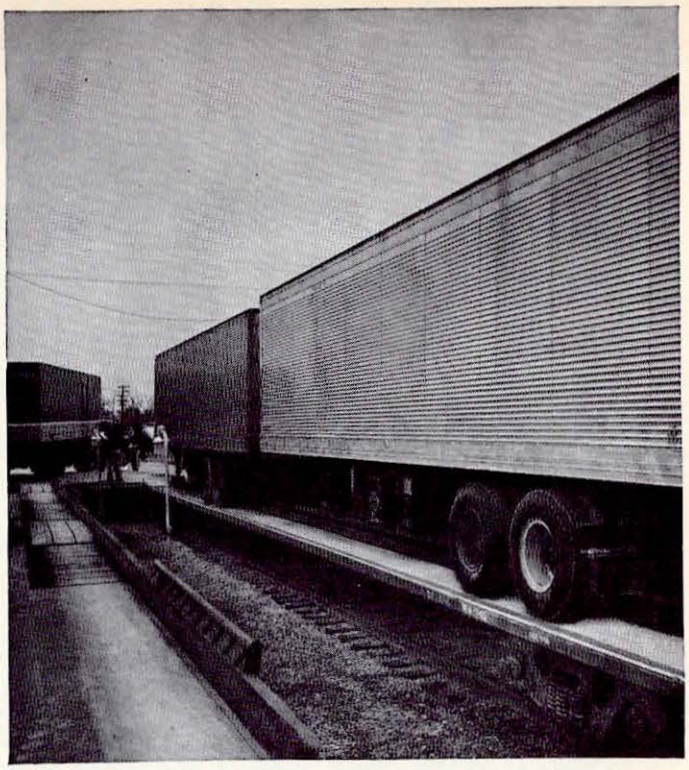
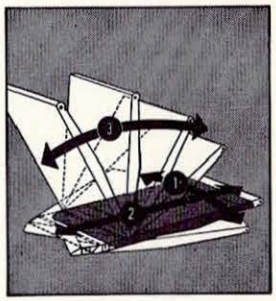


New Bridgeplate System helps stop piggyback terminal delays.

Malfunction of conventional bridgeplates often causes costly car delays at the terminal. New SS-1 Bridgeplates help eliminate this expense. In addition, plate loss or damage is prevented and the chance of derailment minimized.

- Exclusive flexible hinge permits plate to rotate and move longitudinally if it is left down. Returns plate to "neutral" automatically when adjacent car no longer interferes.
- Flexible hinge also protects plate and locking pin from trailer impact when in vertical (stored) position. After such impact, plate automatically returns to vertical.
- SS-1 Bridgeplates are 35 lbs. lighter than conventional plates. Easier to handle in the yard. Simple to install on new or existing equipment.



Above, exclusive 3-way movement of new USG Bridgeplate System. For more information on how it can help reduce train delays and car "down-time," call (312) 321-3766; or write 101 S. Wacker Dr., Chicago, Ill. 60606.

Transportation Products Division

UNITED STATES GYPSUM

BUILDING AMERICA

Circle 37 on coupon page 67

What is Nordberg doing to help you stretch your track maintenance dollars?

Nordberg Organized Mechanization

For over four decades Nordberg has been developing innovative machinery to substitute mechanical efficiency for costly muscle power in Track Maintenance.

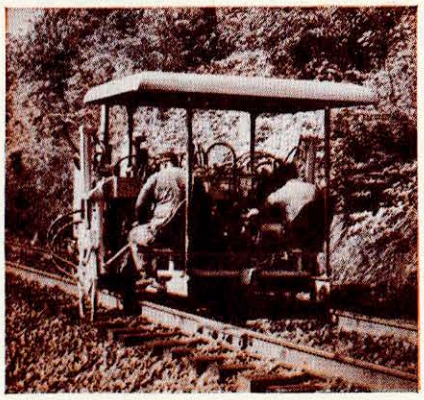
Today, it takes more than mechanical competence to stay ahead of costs. Organized mechanization, the smart employment of flexible machinery groups, for tie and rail renewal; for track alignment; for routine Track Maintenance—will pay dividends that count in the front office.

You can count on Nordberg for the mechanical innovation and the know-how to help you make that smart selection from some 30 odd "mechanical muscles." To name a few:

Nordberg Hydra-Spiker

The diesel-powered Hydra-Spiker is a key member in any tie renewal project. It is the only Track Maintenance machine that uses continuous pressure exerting 2500 psi to drive spikes. Operation is fast and simple. Smooth hydraulic pressure literally pushes spikes into a tie. Rail clamps grip each tie. The Hydra-Spiker then drives any rail or anchor spike into any tie plate or spike hole punching.

As standard equipment, the Hydra-Spiker has a built-in turntable and a canopy. A portable set-off stand or set-off rails are optional.



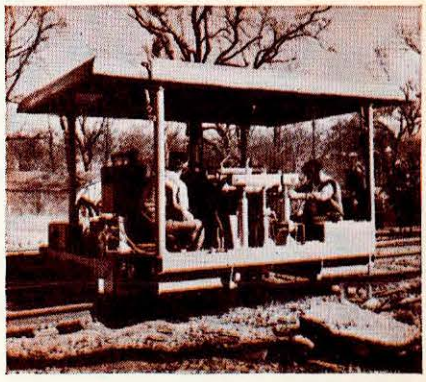
The Hydra-Spiker is available as a one-man machine or a two-man model for maximum production rates.

Bulletin 364.

Nordberg Rail Gang Spiker

This high production machine speeds spiking to save money in rail laying operations. The self-propelled Rail Gang Spiker is capable of driving 1200 spikes per hour (600 ties per hour). And with a slight adjustment, it has the ability to also drive anchor spikes.

The two-man operation of spike feeding and driving is fast and simple. The Rail Gang Spiker exerts 2000 psi of hydraulic pressure to push spikes into ties. Its smooth and continuous action eliminates possible impact damage to rail bases.



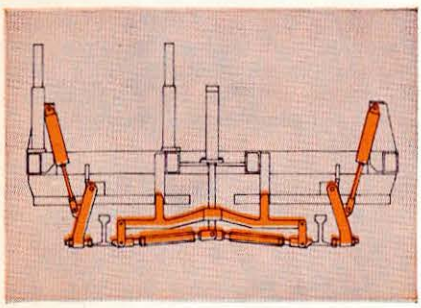
As standard equipment, the Rail Gang Spiker is equipped with a self-contained turntable, a four-wheel drive, hydraulic disc brakes, and canopy.

Bulletin 386.

Nordberg Gaging Attachment

This adjustable hydraulic device accurately sets gage between rails when laying any rail section in either standard lengths or continuous welded rail. Used as an accessory to the Rail Gang Spiker, steel gangs can gage the rail and in doing so, spike 20% of the ties at the same time.

In conjunction with the gaging device, two hydraulic side levers hold rails in gage during spiking operations. For travel, the Gager can be securely locked out of its operating position.



The Gaging Attachment can be ordered as optional equipment for new machines or added to machines already in use.

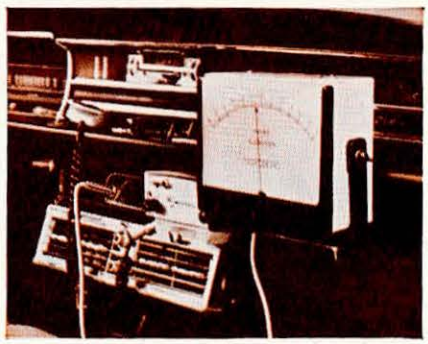
Bulletin P218

Nordberg X-Level Indicator

This instrument permits the rapid and accurate reading of variations in cross-level from the comfort of your rail vehicle.

The indicator works on a 12-volt system. It simply plugs into a cigarette lighter, or can be wired-in with a switch. After adjusting the pointer at "0", track level variations can be pinpointed easily and accurately.

As the vehicle moves down the track, an operator can monitor track level as displayed on the Indicator dial.



The X-Level Indicator is furnished with a primary U-Swivel which is easily attached to any stationary bracket.

Bulletin P220

Nordberg Total Capabilities

Recent acquisitions of compatible equipment lines and the impetus of a Rex Chainbelt-Nordberg merger give us new resources in terms of talent, facilities and technical capabilities. We are quickly translating these new resources into new machinery—mechanical muscles designed to measure their own worth in reduced operating costs, for you:

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- Plate Placer
- Power Jack
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- Rail Drill
- Rail Gang Spiker
- Rail Grinders
- Scarifier-Inserter
- Spike Hammer
- Hydraulic Spike Puller
- Mechanical Self-Propelled Spike Puller
- Spike Straightener
- Surf-Rail Grinder
- Switchliner
- Tie-Axe
- Tie Drill
- Tie Spacer
- Trakliner®
- Track Shifter
- Trak-Surfacer
- X-Level Indicator

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Circle 11 on coupon page 67

Eugene E. Koch, assistant director, Bureau of Unemployment and Sickness Insurance, named director of the Bureau, to succeed **George W. Kenega,** retired.

SEABOARD COAST LINE.—James D. Bozard, assistant vice president-freight traffic, Jacksonville, elected vice president—sales. **Nelson S. DeMuth,** assistant vice president-pricing, elected vice president-marketing, Jacksonville.

Lawrence T. Oliver, administrative assistant to the chairman, retired Jan. 31.

J.L. Huff appointed district sales manager, Fort Pierce, Fla.

SOUTHERN.—Edward T. Breathitt, Jr., special counsel, appointed vice president, public affairs, effective March 1, with headquarters at Washington, D.C., and Hopkinsville, Ky. Mr. Breathitt was formerly governor of Kentucky.

Robert H. Smith, treasurer, retires April 1, after more than 51 years with the Southern. **George M. Williams,** assistant vice president-finance, appointed assistant vice president and treasurer. **T.H. Kerwin,** manager-financial planning, promoted to the newly created post of director-financial planning.

TRAILER TRAIN CO.—W.R. Shannon elected vice president-transportation and maintenance. Mr. Shannon was formerly assistant vice president-operations, **Burlington Northern,** Billings, Mont. **Norman V. Reichert,** formerly assistant treasurer, **United Air Lines,** elected vice president-finance.

UNION PACIFIC.—Donald H. Glowen, assistant traffic manager, New York, named traffic manager, Omaha, to succeed **Robert S. Olsen,** transferred to San Francisco.

WESTERN PACIFIC.—J. Paul Wilmoth appointed director of market information; **James N. Baker,** general manager-pricing services; **P. Richard McElheney,** manager-pricing services-transcontinental; **Ronald M. Tofanelli,** manager-pricing services-west of transcontinental; **Thor C. Olsen,** assistant manager-pricing services-west of transcontinental.

William F. Schmidt appointed sales manager, with headquarters in Oakland, Calif.

WESTERN RAILROAD ASSN.—Clark Hungerford appointed to the newly established position of assistant to president, with headquarters in Chicago. Mr. Hungerford was formerly operations manager, **Burlington Northern,** Billings, Mont.

SUPPLY TRADE

W.M. McCombs, William M. McCombs Co., P.O. Box 198-A, Pembroke, Mass., has been appointed manufacturer's representative, Railroad Division, **Wix Corp.,** with responsibility for filter sales to railroads in the Northeastern states.

Raymond E. Jenkins has been appointed executive vice president, **Precision National Corp.**

William F. Wenc has been named manager, welding methods, **Pullman-Standard Division** of **Pullman Incorpofated,** Hammond, Ind., to succeed **George D. Weaver,** retired.

James A. Culbertson has been named general manager of operations for the Youngstown, Ohio, and Hammond, Ind., plants of **Youngstown Steel Door Co.**

GATX-Armco-Boothe has changed its name to **GATX/Armco Leasing Co. James J. Glasser** is president and chief executive.

Donald F. Kittredge has been elected president and a director, **Litewate Transport Equipment Corp., Milwaukee, Wis.** Mr. Kittredge was vice president of sales, **Standard Railway Equipment Division, Stanray Corp.** Stanray owns 90% of the stock of Litewate.

John B. Gardner, vice president-engineering, **Kerite Co.** Seymour, Conn., has been named senior vice president. **Henry C. Spencer** has been named vice president-administration. Mr. Spencer will continue to hold the position of secretary of the corporation.

INDUSTRIAL TRAFFIC

Arthur Stavinga, general traffic manager, Transportation Division, **General American Transportation Corp.,** Chicago, retired March 1, after 29 years with the company. **G.W. Wright** has been named director of traffic and transportation systems. **Harold J. Carls** has been appointed traffic manager, and **Albert H. Bulmann** has been named assistant traffic manager.

Louis S. Goldberg has joined **American Can Co.** as manager, distribution operations, Consumer and Service Industries group, Greenwich, Conn., a newly created position. He was formerly director of corporate distribution, **National Sugar Refining Co.**

John M. Larimer has been appointed director of traffic, Central Moloney Transformer Division, **Colt Industries Inc.,** Pittsburgh.

David W. Thayer has been promoted to manager, distribution planning and public warehousing, Traffic Division, **Minnesota Mining & Manufacturing Co.,** St. Paul, Minn. **Frank M. Wilcox** has been appointed manager, rate planning and classification, Traffic Division. **Paul A. Larsen** has been promoted to supervisor, Transportation Law, Traffic Division.

Frank W. Horan, manager of general traffic, **Pitney Bowes,** Stamford, Conn., has been appointed manager of distribution there.

OBITUARY

Paul J. Graham, manager transit market development, **WABCO** Signal & Communications Division, died March 9 after a brief illness.

John P. McKeague, 80, retired superintendent, **Chicago, West Pullman & Southern,** died Feb. 25 in Oak Lawn, Ill.

Kenneth R. Rudstrom, traffic manager, Cargill Processing and Refining Division, Memphis, Tenn., died Feb. 28, after a long illness.

If our warehouse can't service your southeastern customers better than yours can...

we won't ask for your business.

Can you beat this service? From our modern warehouse near Atlanta, we'll ship the same day on orders that arrive by noon; on others, the next morning. And with our quick access to 2 interstates plus Southern Railway and Atlanta Airport—we can probably fill orders in many states faster than your multiple warehouses can. And reward you with big inventory savings. Find out more from Phil Nichols, (404) 448-9082. TWX-810-766-4590. Or write P.O. Box 47652 (N.E. Expressway), Atlanta, Ga. 30340.

SRDS Southern Region Distribution Services

Circle 39 on coupon page 67

Market Outlook

CARLOADINGS

Loadings of revenue freight in the week ended March 11 totaled 487,004 cars, according to the Association of American Railroads. This was a decrease of 2,409 cars, or 0.5%, compared with the previous week, and a decrease of 14,758 cars, or 2.9%, compared with the corresponding week last year. Ton-miles generated by carloadings in the week ended March 11 are estimated at 14.8 billion, an increase of 3.2% above the corresponding week of 1971.

REVENUE FREIGHT CARLOADINGS

Commodity	Mar. 11 week	Mar. 4 week	Feb. 26 week
Grain	24,416	24,485	21,436
Farm products	11,106	12,328	13,520
Metallic ores	17,020	16,911	15,129
Coal	90,142	85,717	82,361
Crushed stone, gravel & sand	22,232	20,562	20,131
Nonmetallic minerals	9,036	9,495	9,001
Grain mill products	18,596	18,709	17,592
Food and kindred products	23,980	25,359	23,603
Primary forest products	24,048	24,480	24,985
Lumber & wood products (except furniture)	17,051	17,355	17,090
Pulp, paper & allied products	22,650	23,406	23,044
Chemicals & allied products	30,473	30,710	27,866
Petroleum products	9,299	9,013	9,116
Stone, clay & glass products	20,176	19,654	17,329
Coke	8,212	7,470	7,439
Metals & products	23,058	25,685	22,950
Motor vehicles & equipment	26,308	26,245	26,041
Waste & scrap materials	15,770	15,090	14,527
Forwarder & shipper assn. traffic	6,085	6,660	6,049
All other carloads	66,793	68,476	61,893
LCL traffic	553	563	488
Total cars loaded	487,004	488,373	461,590

Cumulative total, 10 weeks	1972	1971
	4,662,546	4,904,447

Estimated revenue ton-miles (billions) 10 weeks		
	140.3	140.6

PIGGYBACK LOADINGS

U.S. piggyback loadings for the week ended March 4 totaled 25,999 cars (9.6% above the corresponding week last year) and 44,194 trailers or containers (up 16.1% from 1971). Cumulative volume for the first 9 weeks of 1972 is 209,775 cars (up 2.2% from last year) and 350,454 trailers or containers (up 7.0% from 1971). In addition to freight, 2,518 cars carrying 4,063 trailers or containers of mail and express traffic were handled piggyback. Cumulative figures for the first 9 weeks of 1972 are 22,015 cars (down 29.9% from the 1971 total, and 34,779 trailers or containers (down 22.6% from 1971).

FREIGHT-TRAIN CARS

● *Trailer Train.*—Ordered 19 89-foot 4-inch standard level cars from Bethlehem Steel. This brings the TTX fleet in service and on order as of March 2 to 59,551 cars.

TRANSIT

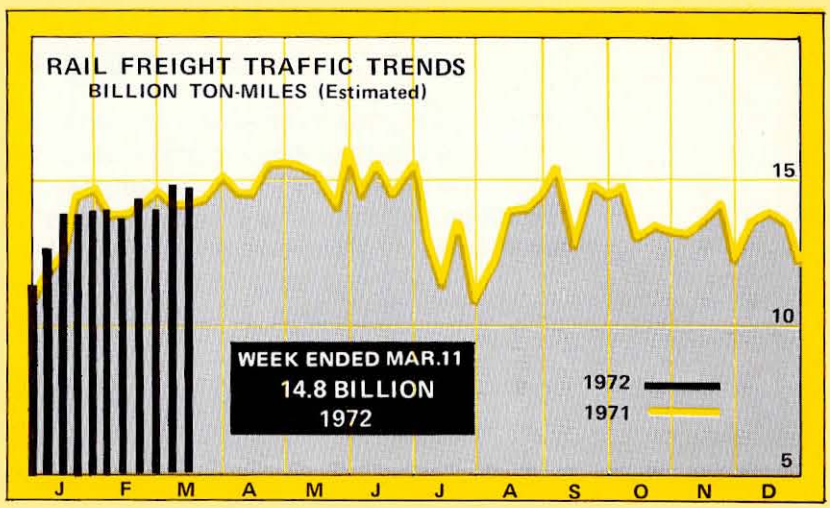
● *WMATA.*—Awarded a $12.4-million contract to Westinghouse Electric for 88 electric stairways for the first phase of the Washington Metro system. Altogether, 600 electric stairways are planned for the system.

NEW FACILITIES

● *Central of Georgia.*—Received ICC authorization to construct and operate 7.2 miles of railroad line to serve a new Georgia power plant. Total cost of construction is estimated at $3.9 million.

● *CP Rail.*—Is spending $5.6 million over two years expanding and renovating its Weston shops at Winnipeg. A new $688,000 paint shop will convert most of CP Rail's rolling stock to new colors. Costing $2.7 million, a semi-automated wheel axle shop will be built on the site of the present paint shop. A shop making specialized trackwork will be renovated and expanded at a cost of $2.2 million. Also, work has begun on a $200,000 waste water treatment system at the Ogden shops in southeast Calgary: the project is scheduled for completion late next June. An associated project—involving separation of locomotive and wheel shop drainage at an estimated additional cost of $150,000—is planned for the summer.

● *Illinois Terminal.*—Ordered a Univac 9400 computer system from Sperry Rand. The system will be used for car accounting, payroll processing and general accounting operations. Visual display terminals will be linked to the computer to facilitate on-line communications with yard operations.



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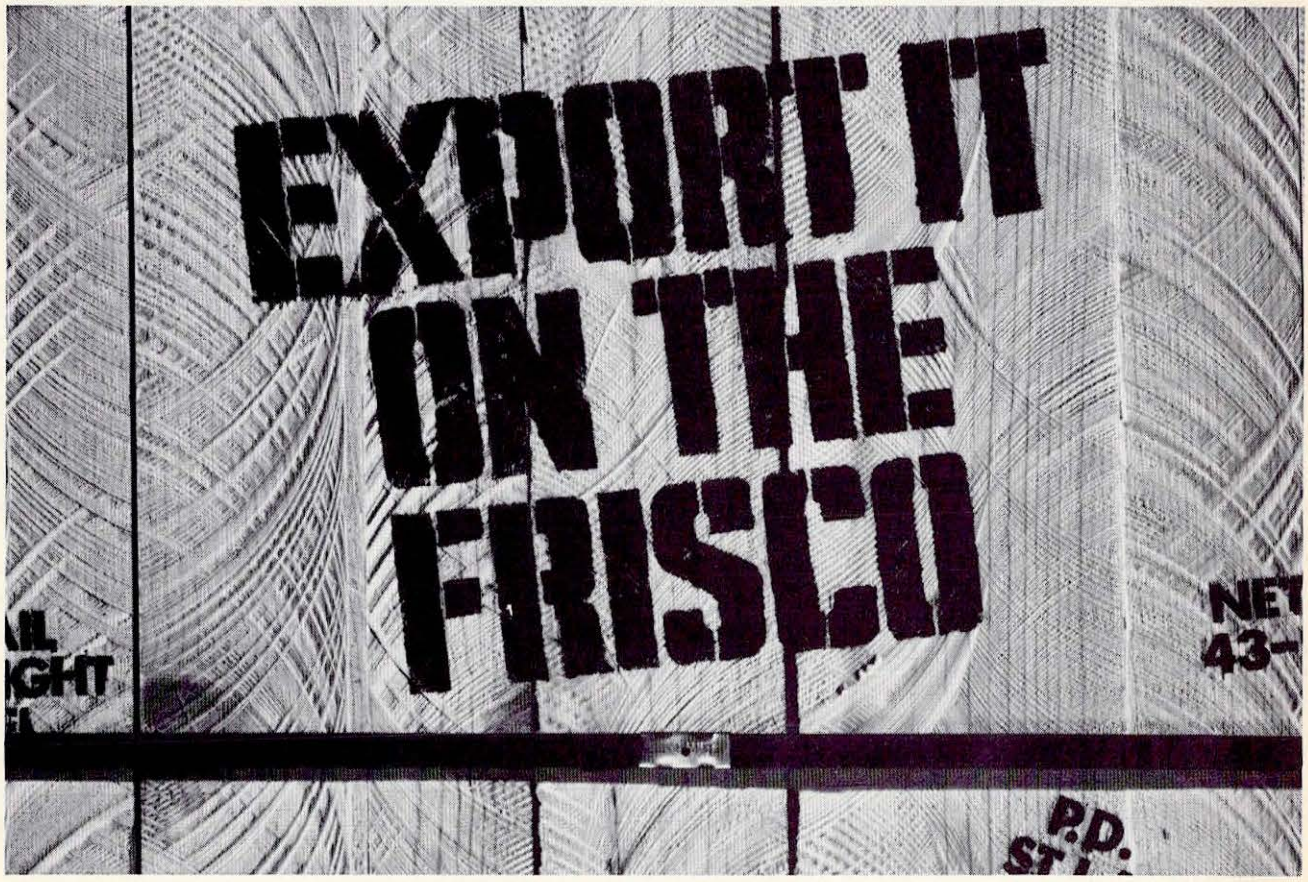

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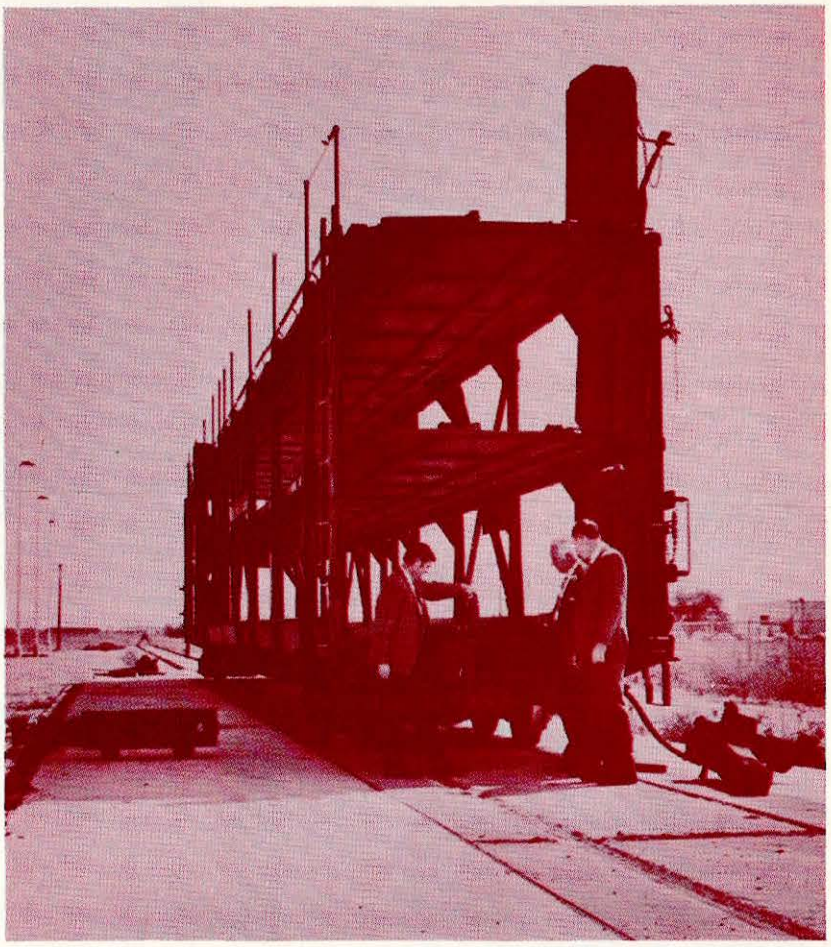

After 7 years of high mileage service, the FreightMaster® end-of-car cushioning units in a Trailer Train Tri-Level Rack Car were removed for a detailed examination.

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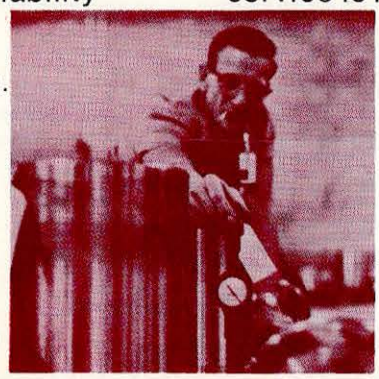
Records show that there was no major maintenance problems with these FreightMaster cushioning units. With nothing more than routine service, the equipment illustrated the inherent durability and reliability afforded by FreightMaster's exclusive design.



Experience indicates that this combination of minimum maintenance and maximum performance is not unusual. Independent experts feel that most FreightMaster equipment in standard service is not likely to require major maintenance within a 10-year life span or more.

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Viewpoint

There is a better way: STA

There exists perhaps no perfect blueprint for rebuilding and renewing America's surface transportation industry. But in the hopperful of proposals now before Congress there is one that stands out, for a number of reasons. It is the Surface Transportation Act—S. 2362 in the Senate; H.R. 11207 in the House.

In the first place it has the support of all of the regulated railway, highway and waterway modes; if its immediate benefits seem to be weighted toward railroads, that is simple recognition by truckers and barge men of the fact that railroad problems at the moment are the most pressing—and that if railroads roll into nationalization, their competitors will soon follow.

STA further recommends itself because it not only seeks to correct the most urgent and most obvious problems of the carriers; it also strikes at some of the root causes.

A key provision of STA is that which would create a Revenue Financing Division in the U.S. Treasury Department, similar to the old Reconstruction Finance Corp., which could loan up to $5 billion to common carriers. The operative word is "loan." During another period when railroad nationalization loomed as a threat, in the 30s, the RFC did in fact advance loans to faltering carriers. The government ultimately netted more than $100 million as strengthened railroads repaid these loans.

Other principal provisions of the STA include these:

—It would direct the ICC to develop standards and procedures for rate levels adequate to cover not only operating but also capital costs, including return on investment.

—It would prohibit discriminatory taxation of carrier property, a practice which now costs railroads around $80 million a year.

—It would require water carriers of dry bulk commodities, now exempt from regulation, to publish rates, and it would direct the ICC to investigate their ownership. It would require motor carriers of livestock and agricultural products now exempt from regulation to be brought under ICC regulation.

—It would create speedier procedures for the abandonment of uneconomic railroad lines.

—It would require states to spend at least 5% of Federal-aid highway monies for grade-crossing protection.

TOMORROW MAY BE TOO LATE

STA is not, perhaps, the ultimate document. Elements of numerous other proposals now before the Congress might well be worked into any final version. The Administration's own program, embodied in S. 2841 and S. 2842, deserves, and is getting, careful study. It has its own formula for helping railroads to meet their urgent capital needs, a formula very similar to that contained in yet another bill, S. 1731, which would guarantee equipment loans to individual carriers.

Former Senator George Smathers, architect of the landmark Transportation Act of 1958, may have been overstating the case when he said in New Jersey a few days ago that unless Congress produces meaningful legislation this year, railroads could be on the road to takeover.

And then again, maybe he wasn't.

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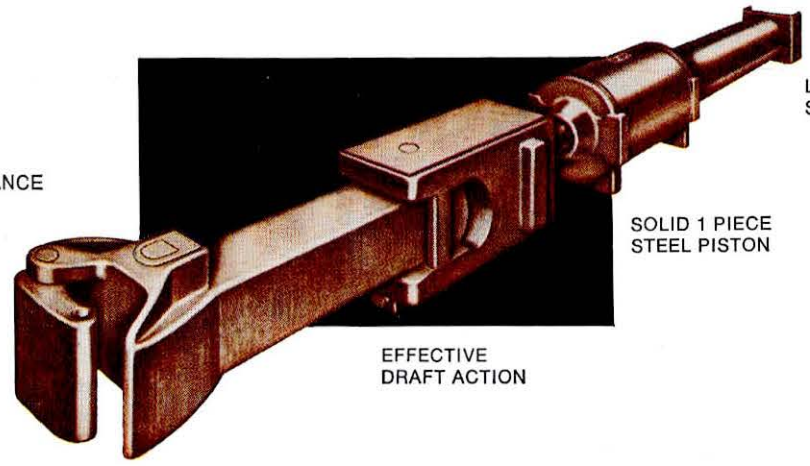

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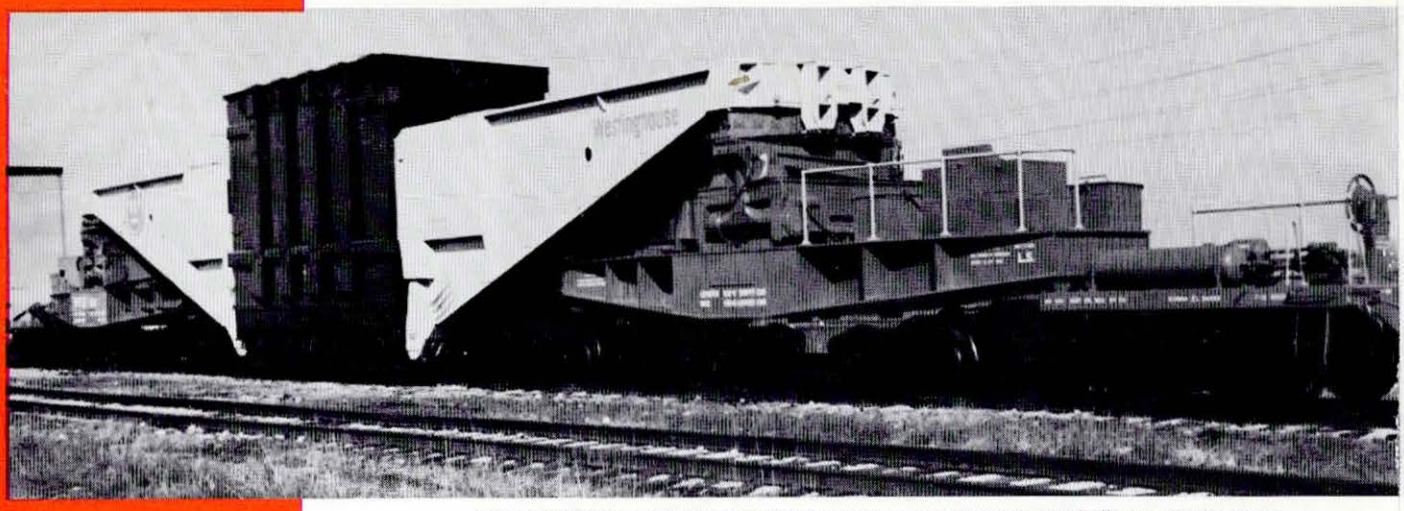

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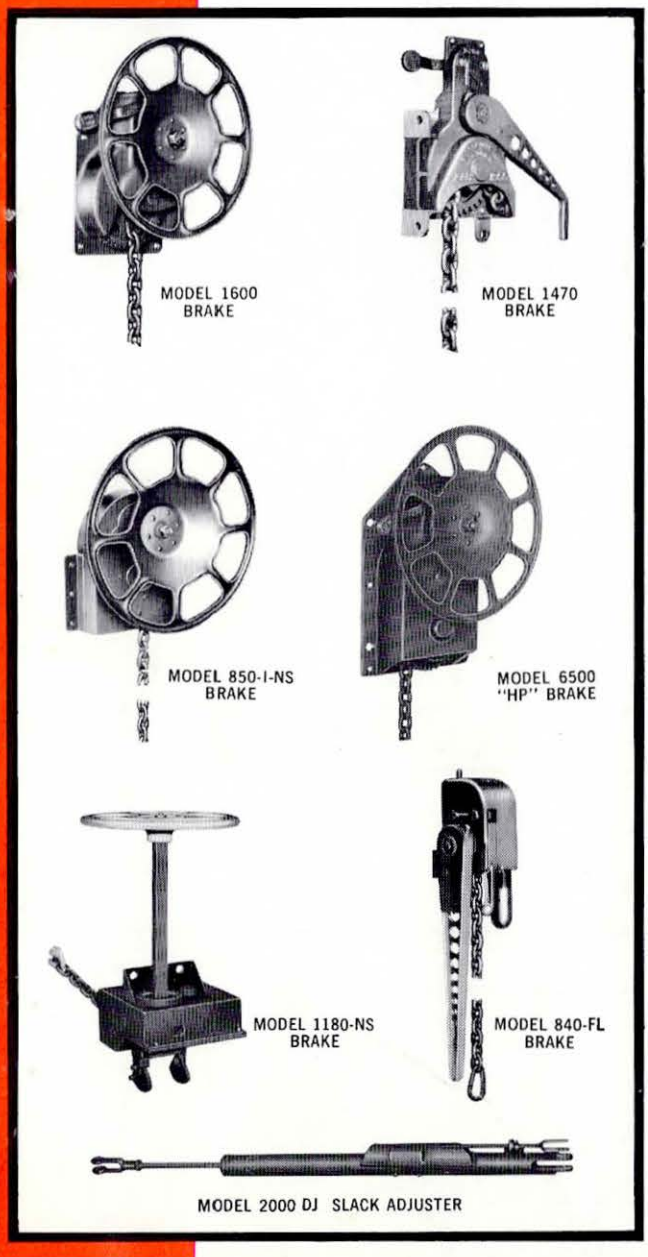

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